File 350:Derwent WPIX 1963-2003/UD,UM &UP=200358
File 347:JAPIO Oct 1976-2003/May(Updated 030902)
File 371:French Patents 1961-2002/BOPI 200209

Set	Items	Description
S1	26	AU='CREE J W'
S2	15	AU='MILLS S A'
S3	2	AU='TWOHY E' OR AU='TWOHY E B'
S4	**2**	**S1 AND S2 AND S3**
S5	213	THERMOPLASTIC()(RESIN OR RESINOUS) AND THERMOPLASTIC()(FIBRE? ? OR FIBER? ?)
S6	0	S1:S3 AND S5
S7	203535	THERMOPLASTIC
S8	4	S1:S3 AND S7
S9	**3**	**S8 NOT S4**

4/7/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

009520222 **Image available**
WPI Acc No: 1993-213764/199326
Absorbent article having fused layers - has absorbent core positioned between topsheet and backsheet, with topsheet being fused to acquisition web
Patent Assignee: PROCTER & GAMBLE CO (PROC)
Inventor: AHR N A; BUELL K B; CARRIER M E; **CREE J W** ; DAGHER K J; **MILLS S A** ; NOEL J R; OSBORN T W; REISING G S; RUUSKA R W; **TWOHY E B** ; BUELL K; DAGHER K; **TWOHY E** ; OSBORN T; BROWN B; COOPER J T; DAVID J L; MARSHALL R L E; PLUMLEY J; BUELI K B; CARIER M E
Number of Countries: 043 Number of Patents: 024
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9311725	A1	19930624	WO 92US9716	A	19921106	199326	B
AU 9230741	A	19930719	AU 9230741	A	19921106	199344	
AU 9331325	A	19930719	AU 9331325	A	19921106	199344	
EP 617602	A1	19941005	EP 92925155	A	19921106	199438	
			WO 92US9716	A	19921106		
PT 101473	A	19941130	PT 101473	A	19940309	199502	
CZ 9401424	A3	19941116	CZ 941424	A	19921106	199504	
CN 1079382	A	19931215	CN 92114648	A	19921111	199513	
HU 70105	T	19950928	WO 92US9716	A	19921106	199546	
			HU 941797	A	19921106		
BR 9206924	A	19951114	BR 926924	A	19921106	199603	
			WO 92US9716	A	19921106		
NZ 245065	A	19960528	NZ 245065	A	19921110	199626	
JP 8504607	W	19960521	WO 92US9716	A	19921106	199646	
			JP 93510903	A	19921106		
EP 617602	B1	19970326	EP 92925155	A	19921106	199717	
			WO 92US9716	A	19921106		
DE 69218623	E	19970430	DE 618623	A	19921106	199723	
			EP 92925155	A	19921106		
			WO 92US9716	A	19921106		
AU 677000	B	19970410	AU 9331325	A	19921106	199727	
ES 2099292	T3	19970516	EP 92925155	A	19921106	199727	
AU 9712552	A	19970529	AU 9331325	A	19921106	199730	
			AU 9712552	A	19970206		
CZ 283960	B6	19980715	WO 92US9716	A	19921106	199835	
			CZ 941424	A	19921106		

CA 2124798	C	19990119	CA 2124798	A	19921106	199914
SG 55052	A1	19981221	SG 963681	A	19921106	199929
AU 709761	B	19990909	AU 9331325	A	19921106	199949
			AU 9712552	A	19970206	
HU 217332	B	19991228	WO 92US9716	A	19921106	200010
			HU 941797	A	19921106	
KR 262839	B1	20000715	WO 92US9716	A	19921106	200131
			KR 94702066	A	19940616	
			KR 99712274	A	19991224	
KR 262840	B1	20000715	WO 92US9716	A	19921106	200131
			KR 94702066	A	19940616	
			KR 99712276	A	19991224	
KR 263225	B1	20000901	WO 92US9716	A	19921106	200134
			KR 94702066	A	19940616	

Priority Applications (No Type Date): US 91810774 A 19911217; US 92944764 A 19920914; US 92957575 A 19921007; JP 91294665 A 19911111; JP 91U110211 U 19911111

Cited Patents: EP 165807; US 4333979; US 4342314; US 4761322; US 4781962; US 4981747

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9311725	A1	E	67	A61F-013/15	
Designated States (National): AU BB BG BR CA CS FI HU JP KP KR LK MG MN MW NO PL RO RU SD UA					
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA SE					
AU 9230741	A				Based on patent WO 9311726
AU 9331325	A				Based on patent WO 9311725
EP 617602	A1	E	67		Based on patent WO 9311725
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU NL SE					
PT 101473	A			A61F-013/15	
CN 1079382	A			A61F-013/15	
HU 70105	T				Based on patent WO 9311725
BR 9206924	A				Based on patent WO 9311725
JP 8504607	W		67	A61F-013/15	Based on patent WO 9311725
EP 617602	B1	E	34		Based on patent WO 9311725
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU NL SE					
DE 69218623	E				Based on patent EP 617602 Based on patent WO 9311725
AU 677000	B			A61F-013/46	Previous Publ. patent AU 9331325 Based on patent WO 9311725
ES 2099292	T3				Based on patent EP 617602
AU 9712552	A			A61F-013/15	Div ex application AU 9331325
CZ 283960	B6				Previous Publ. patent CZ 9401424 Based on patent WO 9311725
CA 2124798	C			A61F-013/46	
AU 709761	B			A61F-013/15	Div ex application AU 9331325 Div ex patent AU 677000 Previous Publ. patent AU 9712552
HU 217332	B				Previous Publ. patent HU 70105 Based on patent WO 9311725
KR 262839	B1			A61F-013/15	Div ex application KR 94702066
KR 262840	B1			A61F-013/15	Div ex application KR 94702066
KR 263225	B1			A61F-013/15	

Abstract (Basic): WO 9311725 A

The article comprises a liquid pervious apertured thermoplastic film topsheet, and a liquid impervious backsheet having a garment-facing face and being joined to the topsheet. An underlying layer has a thickness and preferably is liquid pervious, and more preferably also is absorbent, positioned between the topsheet and the backsheet.

The topsheet is fused to the underlying layer at individual bonded areas that penetrate the topsheet and at least part of the way into the thickness of the underlying layer without penetrating the garment-facing face of the backsheet. At least some of the bonded areas provide structures with drainage passageways for liquids to pass through to the underlying layer.

Dwg.8/19

Abstract (Equivalent): EP 617602 B

An absorbent article (20) comprising a liquid pervious apertured thermoplastic film topsheet (28), a liquid impervious backsheet (30) having a garment-facing face and being joined to said topsheet (28), and an underlying layer (32,34) having a thickness and preferably being liquid pervious, and more preferably also being absorbent, positioned between said topsheet (28) and said backsheet (30), said topsheet is fused to said underlying layer (32,34) wherein said absorbent article (20) is characterized in that said individual bonded areas (44) penetrate the topsheet (28) and at least part of the way into the thickness of said underlying layer (32,34) without penetrating the garment-facing face of said backsheet (30), and at least some of said bonded areas (44) provide structures with drainage passageways for liquids to pass through to said underlying layer (34).

Dwg.1/19

Derwent Class: A96; D22; F07; P32; P34
International Patent Class (Main): A61F-013/15; A61F-013/46
International Patent Class (Additional): A61F-005/44; A61F-013/54; A61L-015/24; A61L-015/26

4/7/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

009520223 **Image available**
WPI Acc No: 1993-213765/199326

Absorbent article e.g. diaper with melt-blown components - has top sheet bonded to back sheet containing acquisition layer and absorbent core

Patent Assignee: PROCTER & GAMBLE CO (PROC)
Inventor: BROWN B; COOPER J T; **CREE J W** ; DAVID J L; MARSHALL R L E; PLUMLEY J; PLUMLEY J A; COSTEA K H; AHR N A; BUELL K B; CARRIER M E; DAGHER K J; **MILLS S A** ; NOEL J R; OSBORN T W; REISING G S; RUUSKA R W; **TWOHY E B** ; DAVID J; MARSHALL R E L
Number of Countries: 042 Number of Patents: 020
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9311726	A1	19930624	WO 92US9753	A	19921106	199326	B
AU 9230741	A	19930719	AU 9230741	A	19921106	199344	
EP 617601	A1	19941005	EP 92924423	A	19921106	199438	
			WO 92US9753	A	19921106		
PT 101473	A	19941130	PT 101473	A	19940309	199502	
JP 7502433	W	19950316	WO 92US9753	A	19921106	199519	
			JP 93510905	A	19921106		

CN 1084054	A	19940323	CN 93107265	A	19930616	199525
CN 1085418	A	19940420	CN 92114631	A	19921111	199527
US 5591149	A	19970107	US 92957575	A	19921007	199708
AU 679433	B	19970703	AU 9230741	A	19921106	199735
AU 9720093	A	19970703	AU 9230741	A	19921106	199735
			AU 9720093	A	19970507	
EP 617601	B1	19980812	EP 92924423	A	19921106	199836
			WO 92US9753	A	19921106	
DE 69226651	E	19980917	DE 626651	A	19921106	199843
			EP 92924423	A	19921106	
			WO 92US9753	A	19921106	
CA 2125645	C	19981124	CA 2125645	A	19921106	199906
ES 2121872	T3	19981216	EP 92924423	A	19921106	199906
US 6103953	A	20000815	US 91810774	A	19911217	200041
			US 92944764	A	19920914	
			US 97811330	A	19970304	
			US 98127212	A	19980731	
MX 9206491	A1	19990501	MX 926491	A	19921111	200056
MX 192334	B	19990614	MX 926492	A	19921111	200058
MX 194471	B	19991209	MX 926491	A	19921111	200110
KR 284676	B	20010402	WO 92US9753	A	19921106	200216
			KR 94702067	A	19940616	
EP 617601	B2	20020710	EP 92924423	A	19921106	200253
			WO 92US9753	A	19921106	

Priority Applications (No Type Date): US 92957575 A 19921007; US 91810774 A 19911217; US 92944764 A 19920914; JP 91294665 A 19911111; JP 91U110211 U 19911111; US 97811330 A 19970304; US 98127212 A 19980731

Cited Patents: EP 320991; EP 394812; EP 470392; US 4846813; US 4904521; US 4981747; WO 9014814

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9311726	A1	E	98	A61F-013/15	
Designated States (National): AU BB BG BR CA CS FI HU JP KP KR LK MG MN MW NO PL RO RU SD UA					
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA SE					
AU 9230741	A				Based on patent WO 9311726
EP 617601	A1	E			Based on patent WO 9311726
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU NL SE					
PT 101473	A			A61F-013/15	
JP 7502433	W		31	A61F-013/15	Based on patent WO 9311726
CN 1084054	A			A61F-013/46	
CN 1085418	A			A61F-013/15	
US 5591149	A		38	A61F-013/15	
AU 679433	B			A61F-013/46	Previous Publ. patent AU 9230741 Based on patent WO 9311726
AU 9720093	A			A61F-013/46	Div ex application AU 9230741
EP 617601	B1	E			Based on patent WO 9311726
Designated States (Regional): AT BE CH DE ES FR GB IT LI LU NL SE					
DE 69226651	E				Based on patent EP 617601 Based on patent WO 9311726
CA 2125645	C			A61F-013/46	
ES 2121872	T3				Based on patent EP 617601
US 6103953	A			A61F-013/20	CIP of application US 91810774 Cont of application US 92944764

Cont of application US 97811330

MX 9206491	A1	A61F-013/46	
MX 192334	B	A61F-013/020	
MX 194471	B	A61F-013/015	
KR 284676	B	A61F-013/15	Previous Publ. patent KR 94703642
			Based on patent WO 9311726
EP 617601	B2 E	A61F-013/15	Based on patent WO 9311726

Designated States (Regional): AT BE CH DE ES FR GB IT LI LU NL SE

Abstract (Basic): WO 9311726 A

Absorbent article, partic. diaper, sanitary napkin, etc., has a topsheet (28) of liquid pervious material, pref. with apertures distributed over the main body portion, partic. comprising a fibre-entangled film of spunlaced non-woven fibres, fused to backsheet with acquisition layer (34) comprising a folded sheet of non-woven material with an average wet pore radius under no load of 40-90 microns. An absorbent core (32) comprises a web of meltblown fibres consisting of micro-denier fibres with an averge wet pore radius under no load of pref. 30-40 microns.

ADVANTAGE - Improved bonding without interference with absorption.

Dwg.2/27

Abstract (Equivalent): US 5591149 A

An absorbent article comprising:

a liquid pervious topsheet;

a liquid impervious backsheet joined to said topsheet;

an absorbent core positioned between said topsheet and said backsheet, said absorbent core comprising a first layer and a second layer, said first layer comprising a web of meltblown fibers, said web of meltblown fibers comprising a plurality of micro-denier meltblown fibers having pores therebetween having a first average wet pore radius size under no load, said second layer comprising a material selected from the group consisting of: a tissue web, a carded nonwoven web, and a spunbonded nonwoven web; and a plurality of superabsorbent material particles between said first and second layers, wherein at least one of said first and second layers has been solvent-treated, and said first and second layers have been secured to each other at least partially by said superabsorbent material particles with heat and pressure bonds; and

an acquisition layer positioned between said topsheet and said absorbent core, said acquisition layer having pores therein having a second average wet pore radius size under no load, wherein said second average wet pore radius size is greater than said first average wet pore radius size.

Dwg.5/27

Derwent Class: A96; D22; F07; P32

International Patent Class (Main): A61F-013/015; A61F-013/020; A61F-013/15; A61F-013/20; A61F-013/46

International Patent Class (Additional): A61F-013/016; A61F-013/54; D04H-003/03

9/26,TI/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

015534185

WPI Acc No: 2003-596335/200356

Tear-resistant laminate useful as elastic diaper ear, has elastic polymeric film, and first and second nonwoven webs both formed of

nonelastic thermoplastic **fibers**

9/26,TI/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

009488660
WPI Acc No: 1993-182195/199322
Absorbent article e.g. sanitary napkin - has rapid distribution strip for improved wicking of liq. exudate

9/26,TI/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX

009488659
WPI Acc No: 1993-182194/199322
Absorbent article - has liq. impervious top sheet with nonwoven outer layer with central opening and apertured thermoplastic **film positioned beneath the opening**

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File 348:EUROPEAN PATENTS 1978-2003/Aug W05
File 349:PCT FULLTEXT 1979-2002/UB=20030911,UT=20030904
Set     Items   Description
S1         33   AU='CREE JAMES':AU='CREE JAMES WILLIAM'
S2          6   AU='MILLS SUE ANN'
S3          2   AU='TWOHY ELIZABETH BILYEU'
S4          2   S1 AND S2 AND S3 [duplicates]
S5       3947   ABSORBEN? AND FUSED
S6         11   (S1:S3 AND S5) NOT S4
S7      19229   THERMOPLASTIC AND (RESIN OR RESINOUS) AND (FIBER? ? OR FIB-
             RE? ?)
S8         13   S1:S3 AND S7
S9      17277   EMBOSS?
S10        11   S8 AND S9
S11         9   S10 NOT S4

 6/6/1     (Item 1 from file: 348)
01166661
TOPSHEET SYSTEMS FOR ABSORBENT ARTICLES EXHIBITING IMPROVED
    HYDROPHILICITY GRADIENTS

 6/6/2     (Item 2 from file: 348)
00953116
IMPROVED TOPSHEET FOR ABSORBENT ARTICLES EXHIBITING IMPROVED MASKING
    PROPERTIES

 6/6/3     (Item 3 from file: 348)
00636250
HYGIENIC ABSORBENT ARTICLE HAVING MELTBLOWN COMPONENTS

 6/6/4     (Item 1 from file: 349)
01018499     **Image available**
APERTURED NON-WOVEN COMPOSITES AND METHOD FOR MAKING

 6/6/5     (Item 2 from file: 349)
00562342     **Image available**
TOPSHEET SYSTEMS FOR ABSORBENT ARTICLES EXHIBITING IMPROVED
    HYDROPHILICITY GRADIENTS

 6/6/6     (Item 3 from file: 349)
00427957     **Image available**
IMPROVED TOPSHEET FOR ABSORBENT ARTICLES EXHIBITING IMPROVED MASKING
    PROPERTIES

 6/6/7     (Item 4 from file: 349)
00371343     **Image available**
A METHOD FOF FORMING A NONWOVEN WEB EXHIBITING SURFACE ENERGY GRADIENTS AND
    INCREASED CALIPER

 6/6/8     (Item 5 from file: 349)
00370919     **Image available**
A METHOD FOR SELECTIVELY APERTURING A NONWOVEN WEB EXHIBITING SURFACE
    ENERGY GRADIENTS

 6/6/9     (Item 6 from file: 349)
00365514     **Image available**
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DISPOSABLE ABSORBENT ARTICLE WITH FIT AND FLUID TRANSFER CAPABILITIES

10/6/10 (Item 7 from file: 349)
00281948 **Image available**
ABSORBENT ARTICLE WITH MEANS FOR DIRECTIONAL FLUID DISTRIBUTION

10/6/11 (Item 8 from file: 349)
00237462 **Image available**
HYGIENIC ABSORBENT ARTICLE HAVING MELTBLOWN COMPONENTS

10/6/1 (Item 1 from file: 348)
01166661
TOPSHEET SYSTEMS FOR ABSORBENT ARTICLES EXHIBITING IMPROVED HYDROPHILICITY GRADIENTS

10/6/2 (Item 2 from file: 348)
00953116
IMPROVED TOPSHEET FOR ABSORBENT ARTICLES EXHIBITING IMPROVED MASKING PROPERTIES

10/6/3 (Item 3 from file: 348)
00636275
ABSORBENT ARTICLE HAVING FUSED LAYERS

10/6/4 (Item 4 from file: 348)
00636250
HYGIENIC ABSORBENT ARTICLE HAVING MELTBLOWN COMPONENTS

10/6/5 (Item 5 from file: 348)
00315659
Substantially fluid-impervious microbubbled polymeric web and method and apparatus for making it.

10/6/6 (Item 1 from file: 349)
00819793 **Image available**
STIFFENED LANE ELASTIC LAMINATE AND METHOD OF FORMING

10/6/7 (Item 2 from file: 349)
00562342 **Image available**
TOPSHEET SYSTEMS FOR ABSORBENT ARTICLES EXHIBITING IMPROVED HYDROPHILICITY GRADIENTS

10/6/8 (Item 3 from file: 349)
00427957 **Image available**
IMPROVED TOPSHEET FOR ABSORBENT ARTICLES EXHIBITING IMPROVED MASKING PROPERTIES

10/6/9 (Item 4 from file: 349)
00365514 **Image available**
DISPOSABLE ABSORBENT ARTICLE WITH FIT AND FLUID TRANSFER CAPABILITIES

10/6/10 (Item 5 from file: 349)
00237462 **Image available**
HYGIENIC ABSORBENT ARTICLE HAVING MELTBLOWN COMPONENTS

10/6/11 (Item 6 from file: 349)

00237461 **Image available**
ABSORBENT ARTICLE HAVING FUSED LAYERS

11/3,AB/4 (Item 4 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00315659
Substantially fluid-impervious microbubbled polymeric web and method and apparatus for making it.
Im wesentlichen flussigkeitsundurchlassige polymere Warenbahn mit Mikroblaschen und Verfahren und Vorrichtung fur deren Herstellung.
Tissu polymere a microbulles en substance impermeable aux fluides et methode et dispositif pour sa production.
PATENT ASSIGNEE:
THE PROCTER & GAMBLE COMPANY, (200173), One Procter & Gamble Plaza, Cincinnati Ohio 45202, (US), (applicant designated states: AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)
INVENTOR:
Lyons, Julie Walston, 2701 Cliff Road, North Bend Ohio 45052, (US)
Battrell, Charles Frederick, 6242 Cortelyou Aveue, Cincinnati Ohio 45213, (US)
Curro, John Joseph, 6445 Ridge Avenue, Cincinnati Ohio 45213, (US)
Gerth, Donald Leroy, 4148 Forsythia Drive, Cincinnati Ohio 45245, (US)
Mullane, William Irvin, Jr., 319 Forest Avenue, Cincinnati Ohio 45215, (US)
Chappell, Charles Wilbur, 8599 Lesourdsville West Chester Road, West Chester Ohio 45069, (US)
Cree, James William , 532 Lowell Avenue, Apt. 1, Cincinnati Ohio 45220, (US)
Ouellette, William Robert, 11987 Blackhawk Circle, Cincinnati Ohio 45240, (US
LEGAL REPRESENTATIVE:
Bottema, Johan Jan et al (73382), Procter & Gamble GmbH Sulzbacher Strasse 40, D-65818 Schwalbach am Taunus, (DE)
PATENT (CC, No, Kind, Date): EP 305123 A1 890301 (Basic)
EP 305123 B1 930505
APPLICATION (CC, No, Date): EP 88307706 880819;
PRIORITY (CC, No, Date): US 88933 870824; US 88930 870824; US 88923 870824
DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: B29C-059/00; A61L-015/00; A61F-013/15;
ABSTRACT EP 305123 A1
A microbubbled, substantially fluid-impervious polymeric web exhibiting substantially the same consumer preferred soft and cloth-like tactile impression and low noise generation levels heretofore only achievable in microapertured, and hence substantially fluid pervious, polymeric webs. In a particularly preferred embodiment, the present invention pertains to a microbubbled polymeric web exhibiting a fine-scale pattern of discrete mushroom-shaped surface aberrations, each of said surface aberrations having its amplitude oriented substantially perpendicular to the surface in which the surface aberration originates. However, unlike microapertured webs which are fluid pervious, at least one tiny, continuous membrane bubble, i.e., a microbubble, is provided substantially coincidental with the maximum amplitude of each surface aberration. Thus, the microbubbled web is substantially fluid-impervious. In addition, such a web employing the fine-scale pattern of microbubbled surface aberrations does not exhibit the "rattling" or "rustling" noises

typically exhibited by prior art fluid-impervious polymeric webs when subjected to movement. As a result, webs of the present invention have particular utility in environments such as substantially fluid-impervious backsheets for disposable infant diapers and adult incontinent diapers. The microbubbled webs are preferably formed by supporting a web of polymeric film on a moving forming structure and applying a liquid to the exposed surface of the web to permanently deform the web in the image of the forming structure. This is preferably accomplished by subjecting the exposed surface of the web to either a high pressure liquid stream or to hydraulic pressure imposed by a liquid laden deformable roll. The microbubbled webs can be produced either in "planar" or "macroscopically expanded" form.

ABSTRACT WORD COUNT: 264
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	6285
CLAIMS B	(German)	EPBBF1	3493
CLAIMS B	(French)	EPBBF1	3689
SPEC B	(English)	EPBBF1	20715
Total word count - document A			0
Total word count - document B			34182
Total word count - documents A + B			34182

11/3,AB/5 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00819793
STIFFENED LANE ELASTIC LAMINATE AND METHOD OF FORMING
STRATIFIE ELASTIQUE A BANDE RENFORCEE ET SON PROCEDE DE FABRICATION
Patent Applicant/Assignee:
TREDEGAR FILM PRODUCTS CORPORATION, 1100 Boulders Parkway, Richmond, VA 23225, US, US (Residence), US (Nationality)
Inventor(s):
CREE James W , 13309 Sandy Shore Mews, Chesterfield, VA 23838, US,
MIDDLESWORTH Jeffrey A, 116 West Maple Avenue, Wauconda, IL 60084, US,
BRUCE Stephen D, 6108 Hidden Oak Court, Crystal Lake, IL 60012, US
Legal Representative:
MUSSELMAN P Weston Jr (et al) (agent), Jenkens & Gilchrist, P.C., 3200 Fountain Place, 1445 Ross Avenue, Dallas, TX 75202, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200153076 A1 20010726 (WO 0153076)
Application: WO 2001US1949 20010119 (PCT/WO US0101949)
Priority Application: US 2000490337 20000124; US 2000491544 20000126
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 7982
English Abstract

A laminate (100) having a first nonwoven (101) and a second nonwoven (102) bonded to an elastic web (103). The laminate includes at least one elastic lane (150) and at least one stiffened lane (110, 120).

11/3,AB/6 (Item 2 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

00562342

TOPSHEET SYSTEMS FOR ABSORBENT ARTICLES EXHIBITING IMPROVED HYDROPHILICITY GRADIENTS

SYSTEMES A COUCHE SUPERIEURE POUR ARTICLES ABSORBANTS PRESENTANT DES GRADIENTS D'HYDROPHILIE AMELIORES

Patent Applicant/Assignee:
THE PROCTER & GAMBLE COMPANY,
Inventor(s):
CREE James William ,
TAYLOR Gregory Wade

Patent and Priority Information (Country, Number, Date):
Patent: WO 200025715 A2 20000511 (WO 0025715)
Application: WO 99US25269 19991027 (PCT/WO US9925269)
Priority Application: US 98183768 19981030
Designated States: AE AL AM AT AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ CZ DE DE DK DK DM EE EE ES FI FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SK SL TJ TM TR TT UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 10483

English Abstract
An apertured polymeric film web having a first surface, a second surface generally parallel to and spaced apart from said first surface, and a plurality of fluid passageways extending between the first surface and the second surface to place the first surface and the second surface in fluid communication with one another. The web is formed of a polymeric film comprising at least one bulk modified layer, the bulk modified layer comprising a substantially homogeneous, stabilized dispersion comprising a comparatively low surface energy material in a polymeric material. The comparatively low surface energy material, referred to herein as a hydrophobic additive, imparts hydrophobicity to the web's first surface, thereby promoting enhanced effectiveness in transporting fluid away from the first surface of the web, particularly when used in combination with a hydrophilic adhesive applied to the web's second surface in a topsheet system of the present invention. In a preferred embodiment the web is used as a topsheet in an absorbent article. In a more preferred embodiment, the web is used as a topsheet in an absorbent article, and the topsheet further includes a hydrophilic adhesive deposited thereon. When used as a topsheet in an absorbent article, the topsheet is peripherally joined with a backsheet and an absorbent core is positioned between the second surface of the topsheet and the backsheet. The second surface of the topsheet is preferably joined to the absorbent core by the hydrophilic adhesive.

11/3,AB/7 (Item 3 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

00427957
IMPROVED TOPSHEET FOR ABSORBENT ARTICLES EXHIBITING IMPROVED MASKING PROPERTIES
COUCHE SUPERIEURE AMELIOREE POUR ARTICLES ABSORBANT FAISANT MONTRE DE PROPRIETES AMELIOREES DE MASQUAGE
Patent Applicant/Assignee:
THE PROCTER & GAMBLE COMPANY,
Inventor(s):
OCTAVIO Maria Teresa,
RAVAGLIA Luis Eduardo,
CREE James William ,
THOMAS Dennis Albert
Patent and Priority Information (Country, Number, Date):
Patent: WO 9818420 A1 19980507
Application: WO 97US19404 19971028 (PCT/WO US9719404)
Priority Application: US 96739094 19961028
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 9887
English Abstract
The present invention provides a fluid pervious fibrous, preferably nonwoven, web having a first surface and a second surface. The web comprises a hydrophilic nonwoven web comprising a plurality of individual, preferably whitened, brightened, and/or opacified, **fibers** associated with one another. The web includes a plurality of surface energy gradients defined by the boundaries of discontinuous, spaced regions of the web which are located on the first surface which exhibit a different surface energy than an adjacent portion of the web. The regions comprise depositions of a preferably whitened, brightened, and/or opacified low surface energy material randomly distributed over the first surface. In a preferred embodiment, the nonwoven web is formed of shaped **fibers** of substantially non-circular cross section, preferably a trilobial or delta cross section, which include whitening, brightening, and opacifying agents within the **fiber** material. Preferably, the low surface energy material includes whitening and opacifying agents within the material itself, with a preferred material comprising a UV curable silicone **resin** including a titanium dioxide particle suspension. The nonwoven fibrous webs of the present invention may be utilized advantageously as a topsheet and/or secondary topsheet in an absorbent article such as a diaper, sanitary napkin, or the like.

11/3,AB/8 (Item 4 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00365514
DISPOSABLE ABSORBENT ARTICLE WITH FIT AND FLUID TRANSFER CAPABILITIES
ARTICLE ABSORBANT A USAGE UNIQUE S'ADAPTANT AU CORPS ET AYANT UNE CAPACITE DE TRANSFERT DE FLUIDE
Patent Applicant/Assignee:
THE PROCTER & GAMBLE COMPANY,
Inventor(s):

CREE James William ,
DAVID Jennifer Lynn
Patent and Priority Information (Country, Number, Date):
Patent: WO 9705840 A1 19970220
Application: WO 96US12472 19960730 (PCT/WO US9612472)
Priority Application: US 95512232 19950807
Designated States: AL AM AT AU AZ BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 4480
English Abstract

An absorbent article comprises a liquid permeable topsheet, a liquid impermeable backsheet attached to the topsheet, an absorbent core of a combination of airlaid material, wetlaid material and superabsorbent, the core being positioned between the topsheet and the backsheet to absorb fluid, and wherein the core includes an elongated, cylindrical, raised portion for improved contact with a use, and a scrim material surrounding at least a portion of the raised portion of the core.

```
File 155:MEDLINE(R) 1966-2003/Sep W2
File   5:Biosis Previews(R) 1969-2003/Sep W1
File  73:EMBASE 1974-2003/Sep W1
File  34:SciSearch(R) Cited Ref Sci 1990-2003/Sep W1
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
File   8:Ei Compendex(R) 1970-2003/Sep W1
File  65:Inside Conferences 1993-2003/Sep W2
File  67:World Textiles 1968-2003/Aug
File  94:JICST-EPlus 1985-2003/Sep W2
File  95:TEME-Technology & Management 1989-2003/Aug W4
File  99:Wilson Appl. Sci & Tech Abs 1983-2003/Aug
File 119:Textile Technol.Dig. 1978-2003/Jun
File 144:Pascal 1973-2003/Sep W1
File 240:PAPERCHEM 1967-2003/Sep W2
File 248:PIRA 1975-2003/Sep W1
File 323:RAPRA Rubber & Plastics 1972-2003/Sep
Set     Items   Description
S1      40430   ABSORBEN?
S2     171950   PAD OR PADS OR DIAPER? ? OR NAPPY OR NAPPIES OR UNDERGARME-
             NT? OR INCONTINEN??
S3     442527   THERMOPLASTIC
S4     585814   RESIN???
S5    1820018   FIBRE? ? OR FIBER? ?
S6        499   (THERMAL?? OR HEAT???)(3N)EMBOSS?
S7     659871   THICKER OR COMPACT OR CONCENTRATE?
S8    4276485   MID OR MIDDLE OR CENTER OR CENTRE OR CORE
S9       7642   S3()S4
S10      9606   S3()S5
S11      6982   7(2N)S8
S12         4   S1:S2 AND S9 AND S10
S13      3508   S7(2N)S8
S14         0   S12 AND S6
S15         0   S12 AND S13
S16       100   S9 AND S10
S17         0   S16 AND S13
S18         0   S16 AND S6
S19         9   S1:S2 AND S3 AND S6
S20         0   S1:S2 AND S3 AND S11
S21       255   S1:S2 AND S3 AND S8
S22        11   S9 AND S21
S23        11   RD (unique items)
S24        11   Sort S23/ALL/PD,D
S25        11   Sort S23/ALL/PY,D

12/6/2     (Item 1 from file: 119)
0615499   04348/98
   Interior Composite Materials.

 12/6/3     (Item 1 from file: 240)
00511160         PAPERCHEM NO: AB6513889
  Manufacture of Ultrafine Fiber
PUBLICATION YEAR: 1993

 12/7,K/1     (Item 1 from file: 67)
DIALOG(R)File  67:World Textiles
(c) 2003 Elsevier Science Ltd. All rts. reserv.
```

00274778 WORLD TEXTILE NO: 2021322
Hydrophilic fibres excels in high-speed processability
Medical Textiles, -/JANUARY (2), 2003
COUNTRY OF PUBLICATION: United Kingdom
DOCUMENT TYPE: Journal; Article
RECORD TYPE: ABSTRACT
ISSN: 0266-2078
MANUFACTURER NAMES: Chisso
LANGUAGES: ENGLISH SUMMARY LANGUAGES: ENGLISH
A hydrophilic fibre made from a **thermoplastic resin** has been developed by Chisso of Japan. The 0.1-1.5 wt% fibre finishing agent adhering to the fibre is claimed to give high-speed processability. The fibre, which may be airlaid or carded, has applications in water-absorbing commodities such as disposable **diapers** , hygienic napkins and **incontinence pads** .
DESCRIPTORS: FINISHING AGENT; HYDROPHILIC PROPERTY; **THERMOPLASTIC FIBER** ; HYGIENE PRODUCT

12/7,K/4 (Item 2 from file: 240)
DIALOG(R)File 240:PAPERCHEM
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.
00307911 PAPERCHEM NO: AB6303700
Absorbent **Article**
Sakurai, A.; Torimae, Y.
PATENT ASSIGNEES: Kao Corp. (Tokyo: Japan)
PATENT NUMBER: US 5069677 PATENT DATE: 911203 PATENT CLASS#: 604/370
PATENT APP# - DATE OF APPLICATION
US 492328 - 900312
JP 8527891 - 850215
JP 8527892 - 850621
JP 8527893 -
JP 85135660 -
SOURCE: U.S. pat. 5,069,677. Issued Dec. 3, 1991. 5 claims. 19 p. Cl.604/370. Filed: U.S. appln. 492,328 (March 12, 1990). Priority: Jap. appln. 27,891/85 (Feb. 15, 1985). Jap. appln. 27,892/85 (Feb. 15, 1985). Jap. appln. 27,893/85 (Feb. 15, 1985). Jap. appln. 135,660/85 (June 21, 1985).
PUBLICATION YEAR: 1991
DOCUMENT TYPE: PATENT
LANGUAGES: ENGLISH
Leakage in a disposable **absorbent** article incl. an **absorbent** core, an impermeable sheet, and a surface sheet (such as a disposable **diaper**) is reduced by affixing a layer of hydrophobic **thermoplastic fibers** to the surface of either the **absorbent** core or one of the other sheets. The fibers are applied to the surface as a step in the fiber formation. For example, the fibers can be spun from a hot melt of the **thermoplastic resin** and then collected on the surface so that the fibers adhere to the surface as they cool.
DESCRIPTORS: **DIAPERS** ; DISPOSABLES; ENGLISH; FIBERS; HOT MELTS; LEAKAGE; PATENTS; PLASTICS; PRDS; SYNTHETIC POLYMERS; THERMOPLASTICS; UNITED STATES

25/6/2 (Item 2 from file: 240)
00571251 PAPERCHEM NO: PB0106382
Fluid-Adsorptive Material
PUBLICATION YEAR: 1994

25/6/3 (Item 3 from file: 240)

00322296 PAPERCHEM NO: AB6403785
Top Sheet for Fluid-Adsorptive Sheet
PUBLICATION YEAR: 1992

25/6/6 (Item 6 from file: 240)
00296000 PAPERCHEM NO: AB6206089
Top Sheet for Personal-Care Product
PUBLICATION YEAR: 1990

25/6/7 (Item 7 from file: 240)
00292197 PAPERCHEM NO: AB6202286
Material for Fluid-Adsorptive Product
PUBLICATION YEAR: 1990

25/6/8 (Item 8 from file: 240)
00289540 PAPERCHEM NO: AB6112409
Water-Permeable Polyolefin Fabric
PUBLICATION YEAR: 1990

25/6/9 (Item 9 from file: 240)
00280112 PAPERCHEM NO: AB6102981
Fluid-Adsorptive Material
PUBLICATION YEAR: 1989

25/6/10 (Item 10 from file: 240)
00275488 PAPERCHEM NO: AB6009307
Manufacture of Air Cleaner Element
PUBLICATION YEAR: 1989

25/6/11 (Item 11 from file: 240)
00252600 PAPERCHEM NO: AB5812509
Fluid Adsorptive Material
PUBLICATION YEAR: 1987

25/7,K/1 (Item 1 from file: 240)
DIALOG(R)File 240:PAPERCHEM

00582282 PAPERCHEM NO: PB0200142
Disposable Absorbent **Articles**
Kenmochi, Y.; Takai, H.; Tsuji, T.
PATENT ASSIGNEES: Uni-Charm
PATENT NUMBER: US 5613962 PATENT DATE: 970325 PATENT CLASS#: 604/378
PATENT APP# - DATE OF APPLICATION
US 569037 - 951207
JP 94309232 - 941213
SOURCE: U.S. pat. 5,613,962. Issued March 25, 1997. 4 claims. 7 p. Cl.604/378. Filed: U.S. appln. 569,037) (December 7, 1995). Priority: Jap. appln. 309,232/94 (December 13, 1994). [Engl.]
PUBLICATION YEAR: 1997
DOCUMENT TYPE: PATENT
LANGUAGES: ENGLISH
A disposable **absorbent** article such as a sanitary napkin comprises an **absorbent core** (e.g., made of fluffed pulp and superabsorbent particles) disposed between a fluid-permeable top sheet and a fluid-impermeable back sheet. The top sheet may be made of a **thermoplastic** film and has liquid guide passageways extending through it from one

surface to the other. A fluid-diffusing sheet such as a nonwoven fabric is disposed between the top sheet and the **core** . The surface of the diffusing sheet that faces the top sheet carries a number of spaced stripes of hydrophobic synthetic resin, with the stripes being in contact with the lower ends of the liquid guide passageways. The fluid-diffusing sheet has a fiber density that is higher in regions underlying the resin stripes than in other regions of the sheet. The resin used for forming the stripes can be an extrusion-molded **thermoplastic resin** such as PE or PP. This construction improves the appearance of the napkin after use.

25/7,K/4 (Item 4 from file: 240)
DIALOG(R)File 240:PAPERCHEM
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.
00321034 PAPERCHEM NO: AB6402523
Multilayered Paper
Den, Y.; Yokota, S.
PATENT ASSIGNEES: Chisso Corp.
PATENT NUMBER: JP 4146300/JP 92146300 PATENT DATE: 920520 PATENT CLASS#: D21H27/30
PATENT APP# - DATE OF APPLICATION
JP 90270113 - 901008
SOURCE: Jap. pat. Kokai 146,300/92. May 20, 1992. 6 p. Cl.D21H27/30. Filed: Jap. appln. 270,113/90 (Oct. 8, 1990).
PUBLICATION YEAR: 1992
DOCUMENT TYPE: PATENT
LANGUAGES: JAPANESE
A terpolymer (greater than 20 wt.%) of ethylene, an alkyl acrylate (6-30 wt.%) such as ethyl acrylate, and maleic anhydride (2-5 wt.%) as a sheath and a **thermoplastic resin** with a m.p. at least 30 C higher than the m.p. of the terpolymer such as HDPE as a **core** are extruded to form a **core** /sheath filament. The filament is cut into short fibers, which are converted to a nonwoven fabric (10-100 g/sq m). The fabric is placed on creped paper, and the assembly is embossed to fuse the fabric to the paper. The two-layered paper is used to make paper towels or disposable **diapers** .
DESCRIPTORS: **ABSORBENT** PAPERS; COMPOSITES; CONV; CREPED PAPERS; **DIAPERS** ; FABRIC; FAR EAST; JAPAN; JAPANESE; LAMINATES; NONWOVENS; PATENTS

25/7,K/5 (Item 5 from file: 240)
DIALOG(R)File 240:PAPERCHEM
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.
00307911 PAPERCHEM NO: AB6303700
Absorbent **Article**
Sakurai, A.; Torimae, Y.
PATENT ASSIGNEES: Kao Corp. (Tokyo: Japan)
PATENT NUMBER: US 5069677 PATENT DATE: 911203 PATENT CLASS#: 604/370
PATENT APP# - DATE OF APPLICATION
US 492328 - 900312
JP 8527891 - 850215
JP 8527892 - 850621
JP 8527893 -
JP 85135660 -
SOURCE: U.S. pat. 5,069,677. Issued Dec. 3, 1991. 5 claims. 19 p. Cl.604/370. Filed: U.S. appln. 492,328 (March 12, 1990). Priority: Jap. appln. 27,891/85 (Feb. 15, 1985). Jap. appln. 27,892/85 (Feb. 15, 1985). Jap. appln. 27,893/85 (Feb. 15, 1985). Jap. appln. 135,660/85 (June 21, 1985).

PUBLICATION YEAR: 1991
DOCUMENT TYPE: PATENT
LANGUAGES: ENGLISH

Leakage in a disposable **absorbent** article incl. an **absorbent core** , an impermeable sheet, and a surface sheet (such as a disposable **diaper**) is reduced by affixing a layer of hydrophobic **thermoplastic** fibers to the surface of either the **absorbent core** or one of the other sheets. The fibers are applied to the surface as a step in the fiber formation. For example, the fibers can be spun from a hot melt of the **thermoplastic resin** and then collected on the surface so that the fibers adhere to the surface as they cool.

DESCRIPTORS: **DIAPERS** ; DISPOSABLES; ENGLISH; FIBERS; HOT MELTS; LEAKAGE; PATENTS; PLASTICS; PRDS; SYNTHETIC POLYMERS; THERMOPLASTICS; UNITED STATES

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File   9:Business & Industry(R) Jul/1994-2003/Sep 15
File  98:General Sci Abs/Full-Text 1984-2003/Aug
File  16:Gale Group PROMT(R) 1990-2003/Sep 15
File 160:Gale Group PROMT(R) 1972-1989
File 148:Gale Group Trade & Industry DB 1976-2003/Sep 16
File 621:Gale Group New Prod.Annou.(R) 1985-2003/Sep 16
File 149:TGG Health&Wellness DB(SM) 1976-2003/Aug W5
Set     Items   Description
S1      17143   ABSORBEN?
S2     164142   PAD OR PADS OR DIAPER? ? OR NAPPY OR NAPPIES OR UNDERGARME-
             NT? OR INCONTINEN??
S3      40691   THERMOPLASTIC
S4     239704   RESIN???
S5     636339   FIBRE? ? OR FIBER? ?
S6        245   (THERMAL?? OR HEAT???)(3N)EMBOSS?
S7     805734   THICKER OR COMPACT OR CONCENTRATE?
S8    4673394   MID OR MIDDLE OR CENTER OR CENTRE OR CORE
S9          1   S1:S2(S)S3(S)S6
S10     20710   S7(3N)S8
S11         1   S9(S)S10 [not relevant]
S12     18781   EMBOSS?
S13         0   S1:S2(S)S3(S)S12(S)S10
S14       265   S1:S2(S)S3
S15         1   S14(S)S12
S16         0   S14(S)S10
S17         1   S15 NOT S11

 17/3,K/1     (Item 1 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2003 The Gale Group. All rts. reserv.
10314184     SUPPLIER NUMBER: 20894817    (USE FORMAT 7 OR 9 FOR FULL TEXT)
Innovation in the gas phase. (plastic manufacturing)
Foxley, David F.
Chemistry and Industry, n8, p305(4)
April 20, 1998
ISSN: 0009-3068      LANGUAGE: English      RECORD TYPE: Fulltext
WORD COUNT:   2748    LINE COUNT:  00227
...     market is the textured foil that goes over the foam padding of the
dashboard crash  pad  in a car. There is a stated aim by car manufacturers
to simplify the selection...
...to make recycling easier. They would like to replace the calendered
PVC/acrylonitrile-butadiene-styrene  embossed  foil with a polyolefin
alternative, and Catalloy is being targeted at that application. There are...
...sheet. Other uses for Catalloy include Adflex of Shore A90 for shoe
soles (versus PVC,  thermoplastic  rubber and polyurethane).
     Hivalloy polyolefin-based alloy
     The grafted polymer alloys produced by the Hivalloy...
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File 636:Gale Group Newsletter DB(TM) 1987-2003/Sep 15
File 441:ESPICOM Pharm&Med DEVICE NEWS 2003/Sep W2
File  20:Dialog Global Reporter 1997-2003/Sep 16
File 610:Business Wire 1999-2003/Sep 16
File 810:Business Wire 1986-1999/Feb 28
File 613:PR Newswire 1999-2003/Sep 16
File 813:PR Newswire 1987-1999/Apr 30
Set     Items   Description
S1       8324   ABSORBEN?
S2     108259   .PAD OR PADS OR DIAPER? ? OR NAPPY OR NAPPIES OR UNDERGARME-
             NT? OR INCONTINEN??
S3      11835   THERMOPLASTIC
S4     130767   RESIN???
S5     400021   FIBRE? ? OR FIBER? ?
S6         55   (THERMAL?? OR HEAT???)(3N)EMBOSS?
S7     613943   THICKER OR COMPACT OR CONCENTRATE?
S8    6385767   MID OR MIDDLE OR CENTER OR CENTRE OR CORE
S9         64   S1:S2(S)S3
S10         1   S9 (S)S6
S11         6   S9(S)S8
S12         0   S11(S)S10
S13      7761   EMBOSS?
S14         2   S9(S)S13
S15         0   S11(S)S14
S16         8   S11 OR S14
S17         8   RD (unique items)

 17/6/4     (Item 4 from file: 636)
02073112    Supplier Number: 43806901  (USE FORMAT 7 FOR FULLTEXT)
Yarns that retain their twist
May, 1993
Word Count:   328

 17/6/5     (Item 5 from file: 636)
01801551    Supplier Number: 43033939  (USE FORMAT 7 FOR FULLTEXT)
Olefins for outdoor use
June, 1992
Word Count:   88

 17/6/6     (Item 1 from file: 613)
00915541  20030108SFW003  (USE FORMAT 7 FOR FULLTEXT)
SUSS MicroTec's Device Bonders Drive Imprint Lithography
Wednesday, January 8, 2003  06:07 EST
WORD COUNT: 1,124

 17/6/7     (Item 1 from file: 813)
1180641                    PHW039
Aristech Opens New Polypropylene Technical Center
DATE: November 5, 1997
WORD COUNT:  306

 17/3,K/1     (Item 1 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
(c) 2003 The Gale Group. All rts. reserv.
05540952    Supplier Number: 100571948  (USE FORMAT 7 FOR FULLTEXT)
Centre-fill strategy for leakage control. (Hygiene).
```

Medical Textiles, p8
May, 2003
Language: English Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 738
... from the upper into the middle layer for a dry feel.
The relatively rigid upper **absorbent** member can be an airlaid web of fluff pulp reinforced with **thermoplastic** fibres, such as polyolefin or polyethylene terephthalate (PET) fibres, which is then moulded with applied heat or heat- **embossed** to provide an upward-deflecting shape. The increased rigidity of this member helps to promote...

17/3,K/2 (Item 2 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
(c) 2003 The Gale Group. All rts. reserv.
04516853 Supplier Number: 58351435 (USE FORMAT 7 FOR FULLTEXT)
Absorbent products made with microfibres.
Medical Textiles, pNA
Jan, 2000
Language: English Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 441
... with wetness or tackiness.
Preferably, the pressure-sensitive adhesive microfibres comprise styrene-isoprene- styrene (SIS) **thermoplastic** block copolymers having a low coupling efficiency (15-65%) and less than 30% styrene, such... sensitive adhesive microfibres is claimed to enhance liquid transport properties by placing the facing and **absorbent core** in intimate contact with each other. These microfibre-coated substrates may further have a liquid or odour **absorbent** immobilized on them.
Thermoplastic polymer microfibres can be used to form liners with enhanced release of Johnson & Johnson, also describes a method for forming **absorbent** products in situ. Here, **thermoplastic** polymer microfibres are sprayed on either side of an **absorbent core** to form a liquid-permeable layer and an impermeable backing surface.
Figure 2 shows an...

17/3,K/3 (Item 3 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
(c) 2003 The Gale Group. All rts. reserv.
02418233 Supplier Number: 44803946 (USE FORMAT 7 FOR FULLTEXT)
HYGIENE - Apertured sanitary napkin cover enhances fluid permeation
Medical Textiles, pN/A
July, 1994
Language: English Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 473
TEXT:
...fluid-permeable cover (US patent 5 188 625) is formed from a nonwoven web of **thermoplastic** fibres with the apertures occupying 20-55% of the surface area of the cover. Each...
...the current conventional type, with a fluid-permeable cover, a fluid-impermeable baffle and an **absorbent core** , the company says. Furthermore, the apertured area can be formed to only a portion of...

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File 350:Derwent WPIX 1963-2003/UD,UM &UP=200359
File 347:JAPIO Oct 1976-2003/May(Updated 030902)
File 371:French Patents 1961-2002/BOPI 200209
Set     Items   Description
S1      60255   ABSORBEN?
S2     189662   PAD OR PADS OR DIAPER? ? OR NAPPY OR NAPPIES OR UNDERGARME-
            NT? OR INCONTINEN??
S3     203615   THERMOPLASTIC
S4    1441894   RESIN???
S5     879203   FIBRE? ? OR FIBER? ?
S6       1654   (THERMAL?? OR HEAT???)(3N)EMBOSS?
S7     428772   THICKER OR COMPACT OR CONCENTRATE?
S8    1269337   MID OR MIDDLE OR CENTER OR CENTRE OR CORE
S9      28810   IC=A61F-013
S10     24782   IC=A61F-005
S11     10500   IC=A61L-015
S12         7   S1:S2 AND S3 AND S6 AND S8
S13         4   S12 AND S9:S11
S14        11   S1:S2 AND S3()S4 AND S3()S5
S15         0   S6 AND S14
S16     25969   EMBOSS?
S17         0   S14 AND S15
S18      2512   S7(3N)S8
S19         0   S14 AND S18
S20     10500   S11 NOT S13
S21        11   S14 NOT S13
S22         3   S21 AND S9:S11
S23        11   (S12 OR S21) NOT (S13 OR S22)

 13/7,K/1     (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003  Thomson Derwent. All rts. reserv.
013968746    **Image available**
WPI Acc No: 2001-452959/200149
Men's disposable urinary bag, used for bedridden patients, comprises
flexible liquid-impervious base sheet, mouth for insertion of penis, body
fluid absorbent panel and bond zone having preset water pressure resistance
Patent Assignee: UNI-CHARM KK (UNIC-N)
Inventor: ABE K; KURITA N; WADA I
Number of Countries: 033  Number of Patents: 008
Patent Family:
Patent No     Kind   Date    Applicat No    Kind   Date     Week
EP 1101475     A2  20010523  EP 2000310307   A   20001120  200149  B
AU 200071659   A   20010524  AU 200071659    A   20001117  200149
CA 2326262     A1  20010519  CA 2326262      A   20001117  200149
JP 2001204755  A   20010731  JP 2000336564   A   20001102  200158
KR 2001051749  A   20010625  KR 200068310    A   20001117  200172
CN 1307858     A   20010815  CN 2000137165   A   20001117  200174
SG 91310       A1  20020917  SG 20006626     A   20001116  200278
US 6540729     B1  20030401  US 2000715405   A   20001117  200324
Priority Applications (No Type Date): JP 2000336564 A 20001102; JP 99329518
  A 19991119
Patent Details:
Patent No  Kind Lan Pg   Main IPC    Filing Notes
EP 1101475    A2 E  10 A61F-013/471
   Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
```

LI LT LU LV MC MK NL PT RO SE SI TR
AU 200071659 A A61F-005/453
CA 2326262 A1 E A61F-005/453
JP 2001204755 A 7 A61F-005/453
KR 2001051749 A A61F-013/15
CN 1307858 A A61F-013/471
SG 91310 A1 A61F-013/471
US 6540729 B1 A61F-005/453
Abstract (Basic): EP 1101475 A2

NOVELTY - Men's disposable urinary bag (1) comprises flexible liquid-impervious base sheet (2), a mouth (4) for insertion of penis and a body fluid **absorbent** panel (3) attached to inner side of base sheet. The mouth is formed by transverse bonding of opposite side edges (5) of sheet. The side edges of base sheet is intermittently bonded to form bond zone (5A) having water pressure resistance of 50-1500 mm.

USE - For bedridden patients, aged men and **incontinent** patients.

ADVANTAGE - The bag is comfortable to use. The irritation and leakage of discharged urine, are prevented by using bag with excessively hardened bond zone.

DESCRIPTION OF DRAWING(S) - The figure shows the perspective view of bag.

Bag (1)
Base sheet (2)
Body fluid **absorbent** panel (3)
Mouth (4)
Side edges (5)
Bond zone (5A)
pp; 10 DwgNo 2/5

Derwent Class: A96; D22; F07; P21; P32
International Patent Class (Main): **A61F-005/453 ; A61F-013/15 ; A61F-013/471**
International Patent Class (Additional): A41B-013/00
Technology Focus:

... intermittent bond in bond zone is made by a plurality of dot like adhesives or **heat - embossing** .. The bond zone preferably extends from the upper to the lower part of the bag so as to get near to the longitudinal **center** line to form the bag tapered downward, wherein a peripheral wall of bag is folded along fold-guides longitudinally extending to bisect a dimension between **center** line and bond zone to divide the wall into a front wall section...

...two layer configuration comprising (i) a hydrophobic non-woven fabric layer(s), made from a **thermoplastic** synthetic resin fiber with a density gradually increasing from the outer side toward the inner side of the bag and/or (ii) a **thermoplastic** resin film with a water resistance higher than that of non-woven fabric

13/7,K/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
012532673 **Image available**
WPI Acc No: 1999-338779/199929
Tampon for feminine hygiene and medical applications
Patent Assignee: JOHNSON & JOHNSON GMBH (JOHJ); LEWIS A L (LEWI-I); LOCHTE K (LOCH-I); SCHOELLING H W (SCHO-I)
Inventor: LEWIS A L; LOCHTE K; SCHOELLING H; SCHOELLING H W
Number of Countries: 084 Number of Patents: 016

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 19753665	A1	19990610	DE 1053665	A	19971203	199929	B
WO 9927878	A1	19990610	WO 98EP7672	A	19981127	199930	
AU 9915628	A	19990616	AU 9915628	A	19981127	199945	
DE 19753665	C2	20000518	DE 1053665	A	19971203	200029	
EP 1035819	A1	20000920	EP 98959891	A	19981127	200047	
			WO 98EP7672	A	19981127		
ZA 9811029	A	20000830	ZA 9811029	A	19981202	200049	
BR 9815135	A	20001010	BR 9815135	A	19981127	200055	
			WO 98EP7672	A	19981127		
HU 200004343	A2	20010328	WO 98EP7672	A	19981127	200124	
			HU 20004343	A	19981127		
CN 1280479	A	20010117	CN 98811773	A	19981127	200128	
CZ 200002060	A3	20010613	WO 98EP7672	A	19981127	200138	
			CZ 20002060	A	19981127		
US 20020026177	A1	20020228	US 98204696	A	19981203	200220	
MX 2000005523	A1	20011101	MX 20005523	A	20000602	200279	
EP 1035819	B1	20030129	EP 98959891	A	19981127	200309	
			WO 98EP7672	A	19981127		
DE 69811114	E	20030306	DE 611114	A	19981127	200325	
			EP 98959891	A	19981127		
			WO 98EP7672	A	19981127		
US 20030105444	A1	20030605	US 98204696	A	19981203	200339	
			US 2003345662	A	20030116		
AU 759853	B	20030501	AU 9915628	A	19981127	200339	

Priority Applications (No Type Date): DE 1053665 A 19971203

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 19753665	A1		22	A61F-013/22	
WO 9927878	A1	E		A61F-013/22	
Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW					
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
AU 9915628	A			A61F-013/22	Based on patent WO 9927878
DE 19753665	C2			A61F-013/22	
EP 1035819	A1	E		A61F-013/22	Based on patent WO 9927878
Designated States (Regional): AT DE ES FR GB IT NL					
ZA 9811029	A		41	A61F-000/00	
BR 9815135	A			A61F-013/22	Based on patent WO 9927878
HU 200004343	A2			A61F-013/22	Based on patent WO 9927878
CN 1280479	A			A61F-013/22	
CZ 200002060	A3			A61F-013/22	Based on patent WO 9927878
US 20020026177	A1			A61F-013/15	
MX 2000005523	A1			A61F-013/20	
EP 1035819	B1	E		A61F-013/22	Based on patent WO 9927878
Designated States (Regional): AT DE ES FR GB IT NL					
DE 69811114	E			A61F-013/22	Based on patent EP 1035819 Based on patent WO 9927878
US 20030105444	A1			A61F-013/15	Div ex application US 98204696
AU 759853	B			A61F-013/22	Previous Publ. patent AU 9915628 Based on patent WO 9927878

Abstract (Basic): DE 19753665 A1

NOVELTY - The tampon has a process stage for the nonwoven covering, before fitted to the tampon blank, using heat and pressure. At least the outer surface of the nonwoven is polished to maintain the structure of the nonwoven and the absorption of the tampon.

DETAILED DESCRIPTION - The nonwoven is polished by calendaring, The nonwoven covering material is of bicomponent staple fibers, heat bonded into a nonwoven, where the fibers have a polyester **core** and a high density polyethylene mantle with a lower melting point than the polyester. The nonwoven is in a weight of 11-17 g/m2 or 14 g/m2. The static friction coefficient of the calendered nonwoven is 0.24-0.26. The tampon, with its extraction ribbon, has a weight of 2.7 g, an absorption of 11.3 ml and a specific absorption of 4.3 ml/g and an absorption speed of 2.1 ml/s with an absorption of higher viscose fluids of 9.9 ml/g. The nonwoven is calendered at a temp. of 80-85degreesC, a pressure of 0.5-2.5 bar and a throughput speed of 8-12 m/s. The tampon blank is of a hydrophilic material as a foam or a carded fiber nonwoven, in ribbon strips where natural and synthetic fibers wind round themselves. The nonwoven strips have a width equal to the tampon blank length. The outer nonwoven covering is needle bonded or heat sealed to the tampon blank. The nonwoven covering section has a nonwoven section secured to the end, to be wound round the tampon blank with the extraction ribbon, and pressed radially into the tampon shape, with the outer side of the nonwoven bonded over a length which is the length of the circumference of the tampon blank. The outer projecting end is welded to the surface. The nonwoven sections are bonded to the nonwoven at spaced points, with point and/or linear mounting points between them. The covering layer is narrower than the nonwoven material width, covering the longitudinal edge of the extraction end of the tampon, and covering the pointed insertion end. The tampon blank is cylindrical with a peripheral surface and two end surfaces. The nonwoven covering layer is over the peripheral surface and at least one of the end surfaces. The other end surface has a tubular wall round the peripheral surface, with two semi-cylindrical sections overlapping to extend from one end surface to the other and to lie over the other end surface. The nonwoven cover has a beaker shape, to take the tampon blank in a tight fit, and with a ring edge over the other end surface. The cover has two additional sections, alternating with the semi-cylindrical sections from one end wall to shortly before the other end surface of the tampon blank. The right angled nonwoven cover section is folded. The extraction ribbon, bonded to the tampon blank, extends from the nonwoven cover. An INDEPENDENT CLAIM is included for the manufacturing process of the tampon. An **absorbent** nonwoven web is fed continuously, of a mixture of natural and synthetic fibers, in a width equal to the tampon length, to be cut into lengths for the separate tampons. A nonwoven covering material is fed continuously, at least partially of **thermoplastic** fibers, in an open structure to allow fluid to pass through, and is cut into lengths. Each nonwoven strip is shaped into a cylindrical tampon blank with or without a nonwoven cover at least partially on the outer side. The wrapped blank is pressed radially to its main axis into the tampon shape. The nonwoven cover material is calendered in advance. Preferred Features: The nonwoven is bonded together by **heat embossing** calendering. Part of the nonwoven surface is bonded by heat at 120-140degreesC, using polyethylene (PE) fiber materials with a melting point of 130degreesC. The nonwoven has a content of cellulose fibers with a multi-arm or star cross section. The nonwoven cover sections are sealed to the nonwoven

web (30) with a higher heat and pressure than for the welding stage. The fluid-permeable **thermoplastic** nonwoven ribbon material (32) is narrower than the nonwoven web (30). On wrapping the remainder sections, a number of concave-convex zones are formed where the materials can overlap on the mantle surface of the tampon blank.

USE - The operation is for the production of a tampon for feminine hygiene or medical applications.

ADVANTAGE - The tampon takes up high menstrual flows, effectively protects the underwear, and is comfortable when in position, with trouble-free removal.

DESCRIPTION OF DRAWING(S) - The drawing shows a production stage for the tampons.

nonwoven web (30)

nonwoven ribbon material (32)

pp; 22 DwgNo 13/17

Derwent Class: A17; A23; A96; D22; F04; F07; P32; P64

International Patent Class (Main): A61F-000/00; **A61F-013/15** ; **A61F-013/20** ; **A61F-013/22**

International Patent Class (Additional): B28B-011/16; D04H-001/22; D04H-001/44; D04H-001/54; D06C-015/02

13/7,K/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

010763205 **Image available**

WPI Acc No: 1996-260159/199627

Sanitary napkin - comprises top sheet having plastic upper and more hydrophilic synthetic fibre lower layers thermally embossed **together except in central zone which is thicker and softer for better fit**

Patent Assignee: UNI-CHARM KK (UNIC-N)

Inventor: KINOSHITA M; KONDO H; WADA I

Number of Countries: 003 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
AU 9534440	A	19960509	AU 9534440	A	19951025	199627	B
JP 8117277	A	19960514	JP 94263963	A	19941027	199629	
US 5746729	A	19980505	US 95546256	A	19951020	199825	
			US 96777860	A	19961231		
AU 701800	B	19990204	AU 9534440	A	19951025	199917	
JP 3091374	B2	20000925	JP 94263963	A	19941027	200051	

Priority Applications (No Type Date): JP 94263963 A 19941027

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
AU 9534440	A		17	A61F-013/50	
JP 8117277	A		4	A61F-013/15	
US 5746729	A			A61F-013/15	Cont of application US 95546256
AU 701800	B			A61F-013/50	Previous Publ. patent AU 9534440
JP 3091374	B2		3	A61F-013/511	Previous Publ. patent JP 8117277

Abstract (Basic): AU 9534440 A

A sanitary napkin has an **absorbent core** between a permeable top sheet and an impermeable back sheet. The top sheet has a **thermoplastic** resin upper layer (11) and a more hydrophilic lower layer (13) of **thermoplastic** synthetic fibres. The layers are intermittently heat-sealed together by **thermal embossing** (15) except in a central zone (6) which is thicker and softer than the remainder.

The lower layer is pref. less hydrophilic than the **core** , and the

upper layer may be nonwoven fabric or perforated film. The **core** is e.g. of fluff pulp, opt. incorporating a super- **absorbent** polymer powder.

ADVANTAGE - The central zone provides a closer fit to minimise the danger of leakage and improves comfort.

Dwg.0/4

Derwent Class: A96; D22; F07; P32
International Patent Class (Main): **A61F-013/15 ; A61F-013/50 ; A61F-013/511**
International Patent Class (Additional): **A61F-013/20 ; A61F-013/472 ; A61F-013/539**

13/7,K/4 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
010554064
WPI Acc No: 1996-051017/199606
Mfg. body fluid absorbent **padding - by fluid pressure perforating heat-softened plastic film and bonding resultant under-surface projections to** absorbent core **surface fibres**
Patent Assignee: UNI-CHARM KK (UNIC-N)
Inventor: WADA I; ICHIRO W
Number of Countries: 013 Number of Patents: 013
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 689819	A2	19960103	EP 95304585	A	19950629	199606	B
TW 264429	A	19951201	TW 95106466	A	19950623	199608	
JP 8010286	A	19960116	JP 94151129	A	19940701	199612	
CA 2153076	A	19960102	CA 2153076	A	19950630	199617	
AU 9523216	A	19960118	AU 9523216	A	19950623	199620	
EP 689819	A3	19970611	EP 95304585	A	19950629	199735	
CN 1120928	A	19960424	CN 95109192	A	19950630	199745	
AU 698578	B	19981105	AU 9523216	A	19950623	199905	
KR 145920	B1	19980801	KR 9518532	A	19950630	200020	
CA 2153076	C	20000418	CA 2153076	A	19950630	200036	
JP 3091365	B2	20000925	JP 94151129	A	19940701	200051	
EP 689819	B1	20011128	EP 95304585	A	19950629	200201	
DE 69524147	E	20020110	DE 624147	A	19950629	200211	
			EP 95304585	A	19950629		

Priority Applications (No Type Date): JP 94151129 A 19940701
Cited Patents: EP 360929; GB 2258840; US 4636417; US 4895749
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 689819	A2	E	6	A61F-013/15	
Designated States (Regional): BE DE FR GB IT NL SE					
TW 264429	A			B32B-031/00	
JP 8010286	A		4	A61F-013/15	
CA 2153076	A			A61F-013/46	
AU 9523216	A			A61F-013/15	
EP 689819	A3			A61F-013/15	
CN 1120928	A			A61F-013/46	
AU 698578	B			A61F-013/15	Previous Publ. patent AU 9523216
KR 145920	B1			A61F-013/15	
CA 2153076	C	E		A61F-013/46	
JP 3091365	B2		4	A61F-013/472	Previous Publ. patent JP 8010286
EP 689819	B1	E		A61F-013/15	

Designated States (Regional): BE DE FR GB IT NL SE
DE 69524147 E A61F-013/15 Based on patent EP 689819
Abstract (Basic): EP 689819 A

Padding to absorb body fluids is made by thermally softening a plastic film, applying diff. fluid pressure to bulge and rupture the film to form through holes with irregular projections on the film lower surface, placing on the upper surface of a fibrous **core** , at least partially heating the film so that the projections are deformed and intertwined with individual fibres, and applying an impermeable plastic film backsheet to the **core** . The film is pref heated under pressure or by **heat - embossing** , and the projections may be mechanically intertwined and/or welded with the fibres. The **core** upper surface is pref. of 1-10 denier fibres with a wt. of 10-45 g/m2 and apparent thickness 1-10 mm. The top-sheet is e.g. of polyethylene and the **core** may contain pulp and **thermoplastic** fibres and high- **absorbency** polymer powder.

USE - For e.g. a sanitary napkin, **incontinence pad** or disposable **diaper** .

ADVANTAGE - Top-sheet and **core** are integrally bonded without loss of softness for improved comfort.

Dwg.0/3

Derwent Class: D22; F07; P32
International Patent Class (Main): **A61F-013/15** ; **A61F-013/46** ; **A61F-013/472** ; B32B-031/00
International Patent Class (Additional): **A61F-013/49** ; **A61F-013/511** ; **A61F-013/539** ; **A61F-013/54**

22/7,K/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010626292
WPI Acc No: 1996-123245/199613
Leakage-proof sheet for sanitary material - formed by laminating nonwoven thermoplastic fibre **based fabric on** thermoplastic resin **film and heat bonding for improved flexibility etc.**
Patent Assignee: KURARAY CO LTD (KURS)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 8019570	A	19960123	JP 94154508	A	19940706	199613	B

Priority Applications (No Type Date): JP 94154508 A 19940706
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 8019570	A		4	A61F-013/15	

Abstract (Basic): JP 8019570 A

A leakage-proof sheet is formed by laminating a nonwoven fabric consisting of a **thermoplastic fibre** having a fibre dia. of up to 10 um on a coloured **thermoplastic resin** film. Thermo-compression bonding is applied to the resulting laminated layer in a pattern shape. A coloured pattern is exposed on the nonwoven fabric surface.

Also claimed is a sanitary material using the leakage-proof sheet with the nonwoven fabric surface outwardly.

USE - The leakage-proof sheet is used for a sanitary material, including a disposable **nappy** , training pants for baby, an **incontinence pad** , or a sanitary napkin.

ADVANTAGE - The outer surface of the sanitary material consists of

the very fine fibre nonwoven fabric. This gives no roughness, yet superior flexible and wearing feeling. Applying thermo-compression bonding to the nonwoven fabric and the film enables integration, providing least peeling between the nonwoven fabric and the film. Sufficient durability is provided. The sheet has sufficient strength to produce the sanitary material. The sanitary material prod. is light-wt. and has a clear coloured pattern meeting the shape of the thermally compressed part.

Dwg.0/0

Derwent Class: A96; D22; F07; P21; P32; P73
International Patent Class (Main): **A61F-013/15**
International Patent Class (Additional): A41B-013/04; **A61F-005/44** ; **A61F-013/54** ; B32B-005/02; B32B-027/12

22/7,K/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX
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010319735 **Image available**
WPI Acc No: 1995-221001/199529

Biodegradable nonwoven fabric used for sanitary goods - consisting of cellulosic fibre and thermoplastic fibre **made from resin consisting of polylactic acid**

Patent Assignee: TOYOBO KK (TOYM)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 7133569	A	19950523	JP 93281224	A	19931110	199529	B

Priority Applications (No Type Date): JP 93281224 A 19931110
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 7133569	A		6	D04H-001/42	

Abstract (Basic): JP 7133569 A

The biodegradable nonwoven fabric consists of (a) a cellulosic fibre and (b) a **thermoplastic fibre** made from a **thermoplastic resin** consisting of polylactic acid and./or a polymer consisting mainly thereof in an (a)/(b) blend ratio of 95/5-20/80, pref. 70/30 - 20/80 by wt. and (b) has a strength of 2.0 g/d or higher and a melting point of above 120 and below 200 deg.C. In the **thermoplastic resin** consisting of polylactic acid and/or a polymer consisting mainly thereof, hydroxyl gp. at the terminal of molecule is ester-bonded with a carboxylic acid. The **thermoplastic resin** is a copolymer of lactic acid and gamma-caprolactone. The fibres are bonded together in a part of the nonwoven fabric. (a) includes natural, regenerated and semi-synthetic fibres. (b) has a viscosity average mol wt. of 5,000 or higher, pref. 104 - 106.

ADVANTAGE - The nonwoven fabric does not cause environmental pollution and has excellent heat resistance. It is useful as surface sheet for sanitary goods such as sanitary napkin and **diaper** and for moist hand towel, agricultural and construction materials, etc.

Dwg.0/0

Derwent Class: A23; A93; A96; A97; D22; F04; P28; P32
International Patent Class (Main): D04H-001/42
International Patent Class (Additional): A47L-013/16; **A61F-013/15** ; **A61F-013/54** ; D01F-006/62; D04H-001/54; D21H-013/20

22/7,K/3 (Item 1 from file: 347)

DIALOG(R)File 347:JAPIO
(c) 2003 JPO & JAPIO. All rts. reserv.
05064070
LEAKAGE PREVENTING SHEET AND SANITARY MATERIAL
PUB. NO.: 08-019570 [JP 8019570 A]
PUBLISHED: January 23, 1996 (19960123)
INVENTOR(s): HATA KATSUMASA
SAKAMOTO YURIKO
APPLICANT(s): KURARAY CO LTD [000108] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 06-154508 [JP 94154508]
FILED: July 06, 1994 (19940706)

ABSTRACT

PURPOSE: To provide a sanitary material for a lightweight **diaper** or the like which is comfortably flexible and which is excellent in design, and a leakage preventing sheet for the sanitary material.
CONSTITUTION: Unwoven fabric formed from a **thermoplastic fiber** having a fiber diameter of less than 10.mu.m and a colored **thermoplastic resin** film are laminated with each other, and are then subjected to pattern-like thermo- compression bonding so as to exhibit a color pattern on the surface of the unwoven fabric. Further, the leakage sheet is used with the unwoven fabric being set on the front side.
INTL CLASS: **A61F-013/15** ; **A61F-013/54** ; A41B-013/04; **A61F-005/44** ; B32B-005/02; B32B-027/12

23/26,TI/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
014490578
WPI Acc No: 2002-311281/200235
Sheet-form female fastener used for disposable diapers , **comprises loop of filament processed yarn fused at fixed intervals on** thermoplastic **resin non-woven fabric by** heat embossing

23/26,TI/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
013282778
WPI Acc No: 2000-454713/200040
Flexible nonwoven fabric for industrial materials like medical, hygienic and packing materials, comprises fiber consisting of polyolefin type thermoplastic **resin containing olefin type elastomer**

23/26,TI/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
012867203
WPI Acc No: 2000-039036/200003
Fibrous suspension panel of seat assembly in motor vehicle

23/26,TI/4 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
012681864
WPI Acc No: 1999-487971/199941
Floor carpet for trunk compartment of vehicle - includes thin film layer

attached at specific position to any one or both side surfaces of felt layers such that hot air passed through the felt layer is interrupted

23/26,TI/5 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011660303
WPI Acc No: 1998-077212/199807
Hydrophilic fibres for cloth-like articles and filters - comprises thermoplastic fibres **coating with finish including fatty acid sorbitan ester(s), adducts with ethylene oxide, white mineral oil, polypropylene glycol diester and nonionic surfactant**

23/26,TI/6 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011390354
WPI Acc No: 1997-368261/199734
Manufacture of fibrous pad **material for reclining part of car seats - is made by filling** thermoplastic resin **fibres into mould, and blowing in hot air to fuse and bond fibres**

23/26,TI/7 (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011201400
WPI Acc No: 1997-179325/199716
Highly smooth fibre formation - by depositing on the fibre mixed compsn. of alkylphosphate salt to which polyoxyalkylene gp. is added and polyoxyalkylene modified silicone contg. amide gp.

23/26,TI/8 (Item 8 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010315528
WPI Acc No: 1995-216786/199529
Sheet-form oxygen@- absorbent **, attachable to foodstuff and pharmaceutical packaging - comprises** absorbent **sheet covered with gas permeable layer attached to self-adhesive base layer at periphery**

23/26,TI/9 (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010289223
WPI Acc No: 1995-190482/199525
Method of making mouldings integral with non-woven cloth - by mixing thermoplastic fibre **with main fibre to form non-woven cloth, heating and then cold pressing between pair of moulds**

23/26,TI/10 (Item 10 from file: 350)
DIALOG(R)File 350:Derwent WPIX

009141047
WPI Acc No: 1992-268485/199232
Micro-pattern-embossed oriented elastomer films - have excellent non-blocking property, reduced gloss and a satin appearance and feel,

useful for elastic waistbands of disposable diapers

23/26,TI/11 (Item 11 from file: 350)
DIALOG(R)File 350:Derwent WPIX

003461758
WPI Acc No: 1982-10659J/198251
Sewing together plastic layer and a cloth - using a yarn contg. thermoplastic fibre **, e.g. nylon, polyester, or PVA which is then heated**

File 348:EUROPEAN PATENTS 1978-2003/Aug W05
File 349:PCT FULLTEXT 1979-2002/UB=20030911,UT=20030904

Set	Items	Description
S1	40346	ABSORBEN?
S2	102733	PAD OR PADS OR DIAPER? ? OR NAPPY OR NAPPIES OR UNDERGARMENT? OR INCONTINEN??
S3	76022	THERMOPLASTIC
S4	226768	RESIN???
S5	221614	FIBRE? ? OR FIBER? ?
S6	1345	(THERMAL?? OR HEAT???)(3N)EMBOSS?
S7	302771	THICKER OR COMPACT OR CONCENTRATE?
S8	564505	MID OR MIDDLE OR CENTER OR CENTRE OR CORE
S9	16700	IC=(A61F-013 OR A61F-005 OR A61L-015)
S10	14	S1(S)S3(S)S6
S11	18400	MORE()(COMPACT OR CONCENTRATED)
S12	46357	THICKER
S13	1346	S11:S12(3N)S8
S14	**1**	**S10(S)S13**
S15	13	S10 NOT S14
S16	**8**	**S9 AND S15**
S17	**5**	**S15 NOT S16**

14/3,AB,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00885206
Fluid distribution materials with improved wicking properties
Flussigkeitverteilungsmaterialen mit verbesserten Dochteigenschaften
Materiaux pour la distribution de fluide presentant des capacites d'imbition par capillarite accrues
PATENT ASSIGNEE:
THE PROCTER & GAMBLE COMPANY, (200173), One Procter & Gamble Plaza, Cincinnati, Ohio 45202, (US), (Proprietor designated states: all)
INVENTOR:
Schmidt, Mattias, Heftricher Strasse 30, 65510 Idstein, (DE)
D'Acchioli, Vincenzo, Parkstrasse 42, 65779 Kelkheim, (DE)
LEGAL REPRESENTATIVE:
Canonici, Jean-Jacques et al (57862), Procter & Gamble European Service GmbH, Sulzbacher Strasse 40-50, 65824 Schwalbach am Taunus, (DE)
PATENT (CC, No, Kind, Date): EP 809991 A1 971203 (Basic)
EP 809991 B1 020123
APPLICATION (CC, No, Date): EP 96108427 960528;
PRIORITY (CC, No, Date): EP 96108427 960528
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; NL; PT; SE
INTERNATIONAL PATENT CLASS: A61F-013/15
ABSTRACT EP 809991 A1
The present invention relates to the selection of materials which are particularly useful as fluid distribution material for being used in disposable absorbent articles by being characterised in that they have a wicking time of less than 120 seconds and a cumulative flux of more than 0.075 grams /cm2 / second for said preferential fluid distribution direction at 12.4 cm height, when applying the Vertical Wicking Test. A further useful selection criterion for such materials is a non-isotropic fluid distribution behaviour, expressed in that the wicking time in the preferential distribution direction is less than 80% of the wicking time

of perpendicular direction at 8.3 cm height, when applying the same test.
ABSTRACT WORD COUNT: 113
NOTE: Figure number on first page: 2
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	199711W4	479
CLAIMS B	(English)	200204	522
CLAIMS B	(German)	200204	464
CLAIMS B	(French)	200204	644
SPEC A	(English)	199711W4	9673
SPEC B	(English)	200204	9650
Total word count - document A			10154
Total word count - document B			11280
Total word count - documents A + B			21434

...SPECIFICATION or at least one of the rolls has an macroscopically curvatured shape, e.g. is **thicker** in the **centre** portion than towards ...rolls. Preferentially, this is applied for webs comprising thermofusible materials (such as the materials comprising **thermoplastic** fibres). The beneficial effect of this additional heat treatment lies in that the webs can...

16/6/3 (Item 3 from file: 348)
00594411
Film laminated material and method and apparatus for making the same

16/6/6 (Item 2 from file: 349)
00487551 **Image available**
SKIN RESURFACING RECOVERY SYSTEM

16/6/7 (Item 3 from file: 349)
00478571 **Image available**
LIQUID MANAGEMENT FILM FOR ABSORBENT ARTICLES

16/3,AB,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2003 European Patent Office. All rts. reserv.
00732159
Method for making body fluids absorbent padding
Verfahren zur Herstellung eines Korperflussigkeiten absorbierenden Artikels
Procede pour la fabrication d'un produit absorbant les fluides corporels
PATENT ASSIGNEE:
UNI-CHARM CORPORATION, (538280), 182 Shimobun, Kinsei-cho, Kawanoe-shi Ehime-ken, (JP), (Proprietor designated states: all)
INVENTOR:
Wada, Ichiro, 385-1 Handa-otsu, Kanada-cho, Kawanoe-shi, Ehime-ken, (JP)
LEGAL REPRESENTATIVE:
Murgatroyd, Susan Elizabeth et al (55511), Baron & Warren 18 South End Kensington, London W8 5BU, (GB)
PATENT (CC, No, Kind, Date): EP 689819 A2 960103 (Basic)
EP 689819 A3 970611
EP 689819 B1 011128
APPLICATION (CC, No, Date): EP 95304585 950629;
PRIORITY (CC, No, Date): JP 94151129 940701
DESIGNATED STATES: BE; DE; FR; GB; IT; NL; SE
INTERNATIONAL PATENT CLASS: **A61F-013/15**

ABSTRACT EP 689819 A2
A thermoplastic film destined to be used as a topsheet (2) of body fluids absorbent padding is thermoformed under the effect of a differential pressure of fluid to provide this film with liquid guiding passages (6) and jags (14) on lower ends of the passages (6). The jags (14) are further thermally deformed to be intertwined with individual fibers of a liquid-absorbent core (4) of the padding and thereby to bond the topsheet (2) integrally to the core (4). (see image in original document)
ABSTRACT WORD COUNT: 99
NOTE: Figure number on first page: 2
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB96	322
CLAIMS B	(English)	200148	327
CLAIMS B	(German)	200148	333
CLAIMS B	(French)	200148	358
SPEC A	(English)	EPAB96	1618
SPEC B	(English)	200148	1643
Total word count - document A			1940
Total word count - document B			2661
Total word count - documents A + B			4601

INTERNATIONAL PATENT CLASS: **A61F-013/15**
...SPECIFICATION or a plastic film integrally to a liquid-absorbent core containing thermoplastic synthetic fibers by **thermally embossing** them. For example, Japanese Laid-Open Utility Model Application No. 1982-139318 discloses a technique by which a topsheet and at least an upper surface of a liquid- **absorbent** core of a disposable diaper are provided with thermal meltability and they are welded together...
...SPECIFICATION such as sanitary napkins and disposable diapers to bond a liquid-permeable topsheet made of **thermoplastic** synthetic fibers or a plastic film integrally to a liquid-absorbent core containing **thermoplastic** synthetic fibers by **thermally embossing** them. For example, Japanese Laid-Open Utility Model Application No. 1982-139318 discloses a technique by which a topsheet and at least an upper surface of a liquid- **absorbent** core of a disposable diaper are provided with thermal meltability and they are welded together...

16/3,AB,K/2 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2003 European Patent Office. All rts. reserv.
00630352
FIBROUS LAMINATED WEB AND METHOD AND APPARATUS FOR MAKING THE SAME AND ABSORBENT ARTICLES INCORPORATING THE SAME
MEHRSCHICHTIGER VLIESSTOFF, VERFAHREN UND VORRICHTUNG ZU DESSEN HERSTELLUNG, SOWIE DIESEN VLIESSTOFF ENTHALTENDE ABSORBIERENDE PRODUKTE
NAPPE FIBREUSE LAMINEE, PROCEDE ET APPAREIL DE FABRICATION DE CELLE-CI ET ARTICLES ABSORBANTS LA CONTENANT
PATENT ASSIGNEE:
KIMBERLY-CLARK WORLDWIDE, INC., (2258250), 401 North Lake Street, Neenah, Wisconsin 54956, (US), (Proprietor designated states: all)
INVENTOR:
ALIKHAN, Mir, Inayeth, 4474 Windsor Oaks Drive, Marietta, GA 30066, (US)
PROXMIRE, Deborah, Lynn, 7915 County MM, Larsen, WI 54947, (US)
RICHTER, Edward, Bruce, 2535 Sunnyview Circle, Appleton, WI 54914, (US)

LEGAL REPRESENTATIVE:
Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721) , Maximilianstrasse 58, 80538 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 667814 A1 950823 (Basic)
EP 667814 B1 010425
WO 9411186 940526
APPLICATION (CC, No, Date): EP 94901323 931108; WO 93US10749 931108
PRIORITY (CC, No, Date): US 973146 921106
DESIGNATED STATES: BE; DE; ES; FR; GB; IT; NL; SE
INTERNATIONAL PATENT CLASS: B32B-005/26; D04H-013/00; **A61F-013/46**
NOTE: No A-document published by EPO
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200117	1080
CLAIMS B	(German)	200117	1055
CLAIMS B	(French)	200117	1162
SPEC B	(English)	200117	13524
Total word count - document A			0
Total word count - document B			16821
Total word count - documents A + B			16821

...INTERNATIONAL PATENT CLASS: **A61F-013/46**
...SPECIFICATION fibrous layer comprising a plurality of staple fibers or continuous filaments of one or more **thermoplastic** materials and a second fibrous layer comprising a plurality of staple fibers or continuous filaments of two or more **thermoplastic** materials. The first layer and second layer, which can be nonwoven webs, are formed into...
...by a spaced apart bonding pattern, such as by thermal bonding between a pair of **heated embossing** or bonding rolls having raised bonding patterns on the outer surfaces thereof. This spaced apart...
...also provides improved liquid penetration and management when placed within the internal structure of an **absorbent** article. Other attributes and advantages of the present invention will be apparent from the...

16/3,AB,K/4 (Item 4 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2003 European Patent Office. All rts. reserv.
00052248
Quilted diaper and sanitary napkin products.
Saugfahige Vorlage, insbesondere Windel oder Damenbinde.
Article absorbant utilisable notamment comme couche ou serviette hygienique.
PATENT ASSIGNEE:
JOHNSON & JOHNSON BABY PRODUCTS COMPANY, 501 George Street, New Brunswick New Jersey 08903, (US), (applicant designated states: AT;BE;CH;DE;FR;IT;LI;LU;NL;SE)
INVENTOR:
Pieniak, Heinz Alfred, 12 Nathan Drive North Brunswick, New Jersey 08902, (US)
LEGAL REPRESENTATIVE:
Jones, Alan John et al , CARPMAELS & RANSFORD 43 Bloomsbury Square, London, WC1A 2RA, (GB)
PATENT (CC, No, Kind, Date): EP 67916 A1 821229 (Basic)
APPLICATION (CC, No, Date): EP 81304248 810916;
PRIORITY (CC, No, Date): US 272614 810611
DESIGNATED STATES: AT; BE; CH; DE; FR; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: **A61F-013/16**

ABSTRACT EP 67916 A1
Quilted diaper and sanitary napkin products.
The present invention relates to a quilted disposable diaper (10) and a quilted sanitary napkin and a method for producing the same. The facing (13) or cover material contains a **thermoplastic** component either in the fiber or the fiber bonding agent. The facing or cover (13) is **heat embossed** onto the **absorbent** batt in a predetermined pattern resulting in the facing or covering adhering to the densified regions (14) making a "quilted" effect.
ABSTRACT WORD COUNT: 81
LANGUAGE (Publication,Procedural,Application): English; English; English
INTERNATIONAL PATENT CLASS: **A61F-013/16**
...ABSTRACT and a method for producing the same. The facing (13) or cover material contains a **thermoplastic** component either in the fiber or the fiber bonding agent. The facing or cover (13) is **heat embossed** onto the **absorbent** batt in a predetermined pattern resulting in the facing or covering adhering to the densified...

16/3,AB,K/5 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00791600
ABSORBENT ARTICLE WITH A CENTRAL RISING MEMBER
ARTICLE ABSORBANT COMPRENANT UN ELEMENT D'ELEVATION CENTRAL
Patent Applicant/Assignee:
KIMBERLY-CLARK WORLDWIDE INC, 401 N. Lake Street, Neenah, WI 54956, US, US (Residence), US (Nationality)
Inventor(s):
CHEN Fung-jou, 3216 White Birch Lane, Appleton, WI 54915, US,
LINDSAY Jeffrey Dean, 20 Diane Lane, Appleton, WI 54915, US,
BEDNARZ Julie Marie, 602 Reed Street, Neenah, WI 54956, US,
DIPALMA Joseph, 451 East Peckham Street, Neenah, WI 54956, US,
Legal Representative:
PUGLIESE Sebastian (et al) (agent), Kimberly-Clark Worldwide, Inc., 401 N. Lake Street, Neenah, WI 54956, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200124754 A1 20010412 (WO 0124754)
Application: WO 2000US26029 20000922 (PCT/WO US0026029)
Priority Application: US 99408498 19991001
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 24888
English Abstract
An absorbent article is disclosed having excellent body fit, center-fill fluid handling performance, and good leakage control in that flow from the center of the article to the longitudinal sides thereof is hindered by a wicking barrier. The article comprises a lower absorbent member, an horizontal wicking barrier over the lower absorbent member, and a central

absorbent section forming a medial hump over the horizontal wicking barrier. An optional central rising member can further enhance the topography of the article when compressed by urging a central portion to deflect vertically upward. In one embodiment, longitudinal upward projections on the horizontal wicking barrier also help control the deformation of the article for good body fit.

Main International Patent Class: **A61F-013/472**

Fulltext Availability: Detailed Description

Detailed Description

... surface of the central absorbent section 16 toward the body of the wearer.

The upper **absorbent** member 18 can be preshaped such that its tendency to deflect upward during lateral compression is at least partially independent of the presence of the middle **absorbent** member 20. For example, the upper **absorbent** member 18 can be stamped, **heat embossed**, molded, or otherwise pre-shaped. The upper **absorbent** member 18 can be a web of fluff pulp reinforced with **thermoplastic** fibers which is then molded with applied **heat** or **heat - embossed** to have an upward-deflecting shape. In one embodiment, the upper **absorbent** member 18 is an airlaid material or airlaid composite that is formed on a...

...a porous sintered surface, to impart an intrinsic concave downwards shape. Binder material such as **thermoplastic** fibers may be present to help create a resilient pre-shaped **absorbent** material capable of holding its shape even when no middle **absorbent** member 20 is present and even when the **absorbent** core 15 is wetted.

Desirably, the upper absorbent member 18 has a rigidity, and...

16/3,AB,K/8 (Item 4 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

00210328

FIBROUS SUPERABSORBENT CORE HAVING INTEGRALLY ATTACHED HYDROPHOBIC FACING LAYER

NOYAU FIBREUX SUPERABSORBANT A COUCHE DE REVETEMENT HYDROPHOBE SOLIDAIRE

Patent Applicant/Assignee:
THE PROCTER & GAMBLE COMPANY,

Inventor(s):
AHR Nicholas Albert,
OOTEN David Mark,

Patent and Priority Information (Country, Number, Date):
Patent: WO 9207534 A2 19920514
Application: WO 91US7988 19911028 (PCT/WO US9107988)
Priority Application: US 9083 19901101

Designated States: AT AT AU BB BE BF BG BJ BR CA CF CG CH CH CI CM CS DE DE DK DK ES ES FI FR GA GB GB GN GR HU IT JP KP KR LK LU LU MC MG ML MN MR MW NL NL NO PL RO SD SE SE SN SU TD TG

Publication Language: English

Fulltext Word Count: 2453

English Abstract

Absorbent structures are disclosed comprising a fibrous, superabsorbent core and an integrally attached facing layer. The structures can be made by forming nonwoven webs of mixtures of thermoplastic fibers and superabsorbent fibers, and a web consisting essentially of thermoplastic hydrophobic fibers. The layers are bonded together using thermal bonding. The structures are suitable for use in disposable absorbent products, in particular, pantiliners.

Main International Patent Class: **A61F-013/15**
Fulltext Availability: Detailed Description
Detailed Description
... of this invention to provide such a core having low bulk and yet a high **absorbent** capacity,
BACKGROUND ART
U,S, Patent 3,067,747, issued December 1 1., 1962 to...
...issued September 13, 1977 to
Thomaschefsky et al. relates to nursing pads having an inner **absorbent** layer including a proportion of synthetic **thermoplastic** polymer fibers and an outer layer of **thermoplastic** polymer fibers. The layers are combined by **embossing** with **heat** and low pressure.
U.S. Patent 4,397,644, issued August 9, 1983 to Matthews...during the thermobonding process. Preferably,
the bonding pattern is discontinuous, as is the case when **heated** **embossing** rolls are used. In areas where the fibers are not bonded they remain soft and...

17/6/3 (Item 1 from file: 349)
00779008 **Image available**
CHANNEL FLOW FILTER

17/6/4 (Item 2 from file: 349)
00357999 **Image available**
FILM LAMINATED MATERIAL AND METHOD AND APPARATUS FOR MAKING THE SAME

17/3,AB,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2003 European Patent Office. All rts. reserv.
00955904
Wiping sheet
Wischtuch
Torchon d'essuyage
PATENT ASSIGNEE:
UNI-CHARM CORPORATION, (538280), 182 Shimobun, Kinsei-cho, Kawanoe-shi Ehime-ken, (JP), (Proprietor designated states: all)
INVENTOR:
Takeuchi, Naohito, c/o Res. & Dev. Div., 1531-7, Takasuka, Wadahama, Toyonama-cho, Mitoyo-gun, Kagawa-ken 769-1602, (JP)
Shimoe, Nariaki, c/o Res. & Dev. Div., 1531-7, Takasuka, Wadahama, Toyonama-cho, Mitoyo-gun, Kagawa-ken 769-1602, (JP)
Yanada, Daisuke, c/o Res. & Dev. Div., 1531-7, Takasuka, Wadahama, Toyonama-cho, Mitoyo-gun, Kagawa-ken 769-1602, (JP)
LEGAL REPRESENTATIVE:
Parry, Christopher Stephen (55212), Saunders & Dolleymore, 9 Rickmansworth Road, Watford, Herts. WD18 0JU, (GB)
PATENT (CC, No, Kind, Date): EP 865755 A1 980923 (Basic)
EP 865755 B1 030528
APPLICATION (CC, No, Date): EP 98302004 980317;
PRIORITY (CC, No, Date): JP 9768728 970321
DESIGNATED STATES: FR; GB; NL; SE
INTERNATIONAL PATENT CLASS: A47L-013/16; D04H-013/00; B32B-005/26
ABSTRACT EP 865755 A1
An absorbent core 4 composed of a nonwoven fabric containing an absorbent fiber at 20 % by weight or more to 80 % by weight or less and a

hydrophobic fiber at 20 % by weight or more to 80 % by weight or less is interposed between a top sheet 3 and a bottom sheet 5, both the sheets being composed of a nonwoven fabric containing an absorbent fiber, such as rayon, at 30 % by weight or more to 70 % by weight or less and a hydrophobic fiber at 30 % by weight or more to 70 % by weight or less. Then, the top sheet 3, the absorbent core 4 and the bottom sheet 5 are bonded together on bonding lines 2. These individual layers are water retentive because of the absorbent fiber therein, and the resulting sheet has good slip properties because of the hydrophobic fiber contained therein. The absorbent core 4 works to enhance the bending resistance.

ABSTRACT WORD COUNT: 164

NOTE: Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	199839	707
CLAIMS B	(English)	200322	741
CLAIMS B	(German)	200322	658
CLAIMS B	(French)	200322	813
SPEC A	(English)	199839	8777
SPEC B	(English)	200322	8798
Total word count - document A			9485
Total word count - document B			11010
Total word count - documents A + B			20495

...SPECIFICATION the faces of the absorbent core 4, and the resulting trilayer sheetis interposed between a **heat emboss** roll with wave emboss formed on the surface and a heat roll with a flat surface or between two **heat emboss** rolls, so that the trilayer sheet are pressurized and **heated** at the **emboss** process, whereby the **thermoplastic** hydrophobic fiber, which is contained in the top sheet 3, **absorbent** core 4 and bottom sheet 5, is thermally melt so that the trilayer sheet is...

...SPECIFICATION sheet 3 and the bottom sheet 5 are overlaid on both the faces of the **absorbent** core 4, and the resulting trilayer sheet is interposed between a **heat emboss** roll with wave emboss formed on the surface and a heat roll with a flat surface or between two **heat emboss** rolls, so that the trilayer sheet are pressurized and **heated** at the **emboss** process, whereby the **thermoplastic** hydrophobic fiber, which is contained in the top sheet 3, **absorbent** core 4 and bottom sheet 5, is thermally melt so that the trilayer sheet is...

17/3,AB,K/2 (Item 2 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

00270468

Synthetic pulp and absorbent comprising the same.

Synthetische Pulpe und diese Pulpe enthaltendes Absorbenz.

Pate synthetique et absorbant la comprenant.

PATENT ASSIGNEE:

MITSUI PETROCHEMICAL INDUSTRIES, LTD., (213640), 2-5, Kasumigaseki 3-chome Chiyoda-ku, Tokyo 100, (JP), (applicant designated states: BE;CH;DE;FR;GB;IT;LI;NL)

INVENTOR:

Horimoto, Koji, 2, Yushudai-Higashi 3-chome, Ichihara-shi Chiba-ken, (JP)

LEGAL REPRESENTATIVE:

Cresswell, Thomas Anthony et al (50352), J.A. Kemp & Co. 14 South Square

Gray's Inn, London WC1R 5EU, (GB)
PATENT (CC, No, Kind, Date): EP 261832 A1 880330 (Basic)
EP 261832 B1 920715
APPLICATION (CC, No, Date): EP 87307932 870908;
PRIORITY (CC, No, Date): JP 86209450 860908; JP 8762687 870319
DESIGNATED STATES: BE; CH; DE; FR; GB; IT; LI; NL
INTERNATIONAL PATENT CLASS: D21H-017/53; D21H-017/36; D21H-021/06; D21H-021/24; D21H-021/38; D01D-005/11; D21H-011/00; D21H-013/10; D21H-013/40;
ABSTRACT EP 261832 A1

A synthetic pulp comprising a pulp fiber of a thermoplastic resin and, adhering to the surface thereof, a polypropylene glycol having a molecular weight of 20 to 10,000, preferably together with a phenolic antioxidant and/or a phosphorous acid ester type antioxidant, has an excellent hydrophilic property even in the dry state and a good wettability or rewettability. This pulp forms a good slurry without bubbling when thrown in water. When a mixture of this synthetic pulp and a second hydrophilic short fiber is subjected to a heat-fusion treatment, a fibrous molded articles having an excellent hydrophilic property, a good wettability or rewettability and a high wet strength is obtained, and this fibrous molded article is especially valuable as an absorbent.

ABSTRACT WORD COUNT: 122
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	699
CLAIMS B	(German)	EPBBF1	653
CLAIMS B	(French)	EPBBF1	766
SPEC B	(English)	EPBBF1	4497
Total word count - document A			0
Total word count - document B			6615
Total word count - documents A + B			6615

...SPECIFICATION specific gravity can be adjusted to some extent by the fusion-bonding treatment of the **thermoplastic** resin pulp **fiber** but **products** having a desired bulk specific gravity can be obtained by performing a pressing treatment simultaneously...
...the production of paper products such as embossed paper, heat-sealing paper, water-resistant paper, **electrical** paper, forming paper and agricultural paper, various non-woven fabric products, sanitary products, construction materials...

17/3,AB,K/5 (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2003 WIPO/Univentio. All rts. reserv.
00263017
FIBROUS LAMINATED WEB AND METHOD AND APPARATUS FOR MAKING THE SAME AND ABSORBENT ARTICLES INCORPORATING THE SAME
NAPPE FIBREUSE LAMINEE, PROCEDE ET APPAREIL DE FABRICATION DE CELLE-CI ET ARTICLES ABSORBANTS LA CONTENANT
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English Abstract

This invention relates to a fibrous laminated material wherein a first fibrous layer (12) comprising a plurality of staple fibers or continuous filaments of a thermoplastic material and a second fibrous layer (22) comprising a plurality of staple fibers or continuous filaments of two or more thermoplastic or other materials are bonded together in a spaced apart bonding pattern (18) having apertures (30) formed therein to form a fibrous laminate having improved liquid distribution and management properties as well as enhanced comfort and softness when placed in contact with human skin. Also disclosed are a method and apparatus for making such a fibrous laminate, as well as absorbent articles incorporating such fibrous laminate.

Fulltext Availability: Detailed Description
Detailed Description
... fibrous layer comprising a plurality of staple fibers or continuous filaments of one or more **thermoplastic** materials and a second fibrous layer comprising a plurality of staple fibers or continuous filaments of two or more **thermoplastic** materials. The first layer and second layer,, which can be nonwoven webs,, are formed into...
...by a spaced apart bonding pattern, such as by thermal bonding between a pair of **heated embossing** or bonding rolls having raised bonding patterns on the outer surfaces thereof . This spaced apart...
...also provides improved liquid penetration and management when placed within the internal structure of an **absorbent** article. other attributes and advantages of the present invention will be apparent from the ensuing...

(FILE 'HOME' ENTERED AT 15:46:19 ON 16 SEP 2003)
FILE 'HCAPLUS' ENTERED AT 15:46:28 ON 16 SEP 2003

L1	41587	S	ABSORBEN?
L2	88488	S	THERMOPLASTIC
L3	660589	S	RESIN?
L4	628591	S	FIBER? OR FIBRE?
L5	2756949	S	THERMAL? OR HEAT?
L6	8488	S	EMBOSS?
L7	22253	S	THICKER OR MORE COMPACT OR MORE CONCENTRATED
L8	891684	S	MID OR MIDDLE OR CENTER OR CENTRE OR CENTRAL OR CORE
L9	23866	S	L2(W)L3
L10	1327	S	L2(W)L4
L11	7	S	L1 AND L9 AND L10
L12	0	S	L6 AND L11
L13	19	S	L1 AND L2 AND L6
L14	204	S	L7(3A)L8
L15	0	S	L13 AND L14
L16	0	S	L13 AND L7
L17	**5**	**S**	**L13 AND L8**

L17 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:8166 HCAPLUS
DOCUMENT NUMBER: 130:67774
TITLE: **Nonwoven fabrics of ***thermoplastic*** long fibers with good tensile strength and abrasion resistance and ***absorbent*** articles therefrom**
INVENTOR(S): Tsujiyama, Yoshimi; Fujiwara, Toshikatsu; Horiuchi, Shingo
PATENT ASSIGNEE(S): Chisso Corporation, Japan
SOURCE: PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9856969	A1	19981217	WO 1998-JP2577	19980610
W: CN, JP, KR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 919656	A1	19990602	EP 1998-924577	19980610
R: DE				

PRIORITY APPLN. INFO.: JP 1997-153901 19970611
WO 1998-JP2577 19980610

AB The nonwoven fabrics comprise ***thermoplastic*** fibers with denier per filament 0.1-10 and have basis wt. 5-35 g/m2 and show area content (A) of heat-bonded portions 5-25%, av. distance (X) between two adjacent bonded portions in the machine direction .ltoreq.2.0 mm, av. distance (Y) between two adjacent bonded portions in the transverse direction .ltoreq.2.5 mm, and ratio (y/x) of av. max. diam. of the bonded portions in the transverse direction to av. max. diam. of the bonded portions in the machine direction 1-15. The nonwoven fabrics are useful for garments, industrial materials, construction materials, and agricultural materials (no data) and medical-care and hygienic materials. Polypropylene was melt spun, passed through an air sucker, exposed to elec. corona, opened, piled on an endless conveyer, and ***embossed*** at 141.degree. to give a

nonwoven fabric comprising fibers with denier per filament 2.0, basis wt. 20 g/m2, A 15%, X 1.0 mm, Y 1.5 mm, and y/x 1.5 and exhibiting tensile strength 0.040 kg/cm-g/m2, handle rating (10 best, 1 worst) 9, and good abrasion resistance and showing good liq. absorption properties on using as disposable diapers.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:661406 HCAPLUS
DOCUMENT NUMBER: 129:344451
TITLE: **Laminated synthetic nonwoven fabrics with high bulk and good handle and ***absorbent*** products therefrom**
INVENTOR(S): Fujiwara, Toshikatsu; Horiuchi, Shingo; Tsujiyama, Yoshizane
PATENT ASSIGNEE(S): Chisso Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10273884	A2	19981013	JP 1997-93215	19970327

PRIORITY APPLN. INFO.: JP 1997-93215 19970327

AB The nonwovens have .gtoreq.2 nonwoven layers and have (A) a layer comprising staple fibers with length 38-90 mm and a (B) layer comprising heat-bondable conjugate fibers with length 3-30 mm and consisting of .gtoreq.2 ***thermoplastic*** polymers comprising polymers with high m.p. and polymers with low m.p. and are heat-bonded to cause fiber-to-fiber bonding of the conjugate fibers and give nonwoven fabrics having B layer having .gtoreq.50% of the intersection angle of the fiber-to-fiber bonding point 60-90.degree.. The laminated nonwoven fabrics are useful for top sheets for disposable diapers and sanitary napkins. A carded web of polypropylene (I) staple fibers was prepd., ***embossed*** at roll temp. 145.degree., laminated with a web of spun fibers from I as the ***core*** and HDPE as the sheath, and heat-treated at air temp. 138.degree. to give a laminated nonwoven fabric exhibiting surface handle rating (10 monitors) 9 and biolog. soln. permeation rate by a specified test 6 s and suitable as top sheets for sanitary napkins.

L17 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:512202 HCAPLUS
DOCUMENT NUMBER: 129:217887
TITLE: **Nonwoven fabrics of synthetic long fibers with improved softness and good adhesion to materials and ***absorbent*** products therefrom**
INVENTOR(S): Fujiwara, Toshikatsu; Horiuchi, Shingo; Sugawara, Shigeyuki
PATENT ASSIGNEE(S): Chisso Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10212651	A2	19980811	JP 1997-9955	19970123

PRIORITY APPLN. INFO.: JP 1997-9955 19970123
OTHER SOURCE(S): MARPAT 129:217887

AB The nonwoven fabrics comprise fibers consisting of a (A) component comprising .gtoreq.20% ethylene-acrylic acid ester-maleic anhydride copolymers and linear higher fatty acids or metal salts thereof (Cn-1H2(n-m)-1COO-)aXa+ (I; n = 10-30; m = no. of unsatd. bonds in the aliph. chain; X = Li, K, Na, Ca, Mg, Zn, Pb, Al,Ba, Cd) and (B) a component comprising cryst. ***thermoplastic*** polymers and having the surface partially or wholly comprising A component and having I content 500-5000 ppm. The nonwoven fabrics are useful for sanitary napkins, disposable diapers, and medical-care products (no data). A compn. contg. 88:9.5:2.5 Et acrylate-ethylene-maleic anhydride copolymer (II) and 3000 ppm (on fiber) Mg stearate as the sheath and isotactic polypropylene as the ***core*** were together melt spun at 50:50 ratio, passed through an air sucker, treated with elec. corona, opened, piled on a conveyer, and ***embossed*** at m.p. or softening temp. of II component to give a nonwoven fabric exhibiting softness rating (10 monitors, 1 good handle per monitor) 9 and strength of adhesion to Al foil 2.4 kg/5 cm, strength of adhesion to kraft paper 7.5 kg/5 cm, and strength of adhesion to rayon fabric 6.4 kg/5 cm.